

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

2 SD 11

A3

12



United States
Department of
Agriculture

Forest Service

Pacific Southwest
Forest and Range
Experiment Station

Resource Bulletin
PSW-22



Vegetation Survey of the Republic of Palau

Thomas G. Cole

Marjorie C. Falanruw

Colin D. MacLean

Craig D. Whitesell

Alan H. Ambacher



The Authors:

THOMAS G. COLE, a forester with the American Pacific Islands Forestry Research Work Unit in Honolulu, was stationed in Koror, Palau, at the time of the vegetation survey reported here. He received a bachelor's in forest sciences (1977) from Texas A&M University. **MARJORIE C. FALANRUW**, a research biologist with the same unit, is stationed in Yap. She holds degrees in biology from the University of California (bachelor's 1965) and the University of Guam (master's 1969). **COLIN D. MACLEAN** is principal mensurationist with the Forest Inventory and Analysis Research Work Unit, Pacific Northwest Forest and Range Experiment Station, in Portland, Oregon. He earned a bachelor's in forestry (1950) from the University of Maine, and a master's in forest management (1951) from the College of Environmental Science and Forestry, State University of New York. **CRAIG D. WHITESELL**, principal silviculturist, is leader of the Station's American Pacific Islands Forestry research in Honolulu. He has a bachelor's in forest management (1951) from West Virginia University and a master's in silviculture (1954) from Duke University. **ALAN H. AMBACHER** is supervisory cartographer in the Forest Service's Pacific Southwest regional office in San Francisco. He attended the Milwaukee School of Engineering.

Acknowledgments:

We thank the staffs of the U.S. Trust Territory of the Pacific Islands and the Soil Conservation Service, U.S. Department of Agriculture, for their assistance in this survey. Trust Territory participants included David Idip, chief of agriculture; Robert Ray, staff forester; and Kozo Yamada, director of natural resources. Soil Conservation Service participants included Jack Kanalz, former State conservationist, and Harry Sato, Hawaii State soil scientist.

We also thank the following individuals from Palau who assisted in the survey: Neil Morriss, former district agriculturist; Herman Francisco, assistant agriculturist; James Remarii, district forester; Marcello Brel, forester; Gerdence Meyer, forester; Ebais Sadang, forester, and Thomas Watson, former Peace Corps forester.

Cover: Upland forest surrounding a water reservoir which supplies water to the city of Koror, Island of Babelthuap, Republic of Palau.

Publisher

Pacific Southwest Forest and Range Experiment Station
P.O. Box 245, Berkeley, California 94701

In cooperation with:

Pacific Northwest Forest and Range Experiment Station
P.O. Box 3890, Portland, Oregon 97208

Forest Service
U.S. Department of Agriculture

June 1987

Vegetation Survey of the Republic of Palau

Craig D. Whitesell

Colin D. MacLean

Marjorie C. Falanruw

Thomas G. Cole

Alan H. Ambacher

CONTENTS

Introduction	1
Geography and Climate	1
Survey Methods	4
Type Classifications	4
Vegetation Type Descriptions	5
Forest	5
Secondary Vegetation	11
Agroforest	11
Nonforest	12
Glossary	13
References	13

INTRODUCTION

Palau is an archipelago of high and low islands located in the western Caroline Islands. The largest island in the group is the heavily forested high island of Babelthuap. Knowledge of the soils and the extent and composition of Palau's vegetation, including the forests, is needed for land-use planning. To fill this need, a formal agreement was drawn up between the High Commissioner of the Trust Territory of the Pacific Islands, and two agencies of the U.S. Department of Agriculture—the Soil Conservation Service and the Forest Service.

Vegetation maps of Palau are a product of this agreement. They were prepared by the Forest Service in cooperation with the government of Palau, and are intended to serve as a working tool for natural resource managers and as a base for resource inventories.

This bulletin describes the different vegetation types, their ecological function and uses for 42 islands in Palau, and includes 17 map sections inside the back cover.

GEOGRAPHY AND CLIMATE

The Republic of Palau, lat. 7°20' N and long. 134°28' E, is located at the extreme western edge of the Caroline Islands. The archipelago lies about 800 km (500 statute mi) north of the equator, 800 km east of the Philippine Islands, and 6,000 km (3,750 statute mi) southwest of Hawaii (*fig. 1*). The island group consists of four volcanic high islands and approximately 200 low and raised coral and coralline limestone islands.

Most of the Republic's usable forest resource is in the centrally

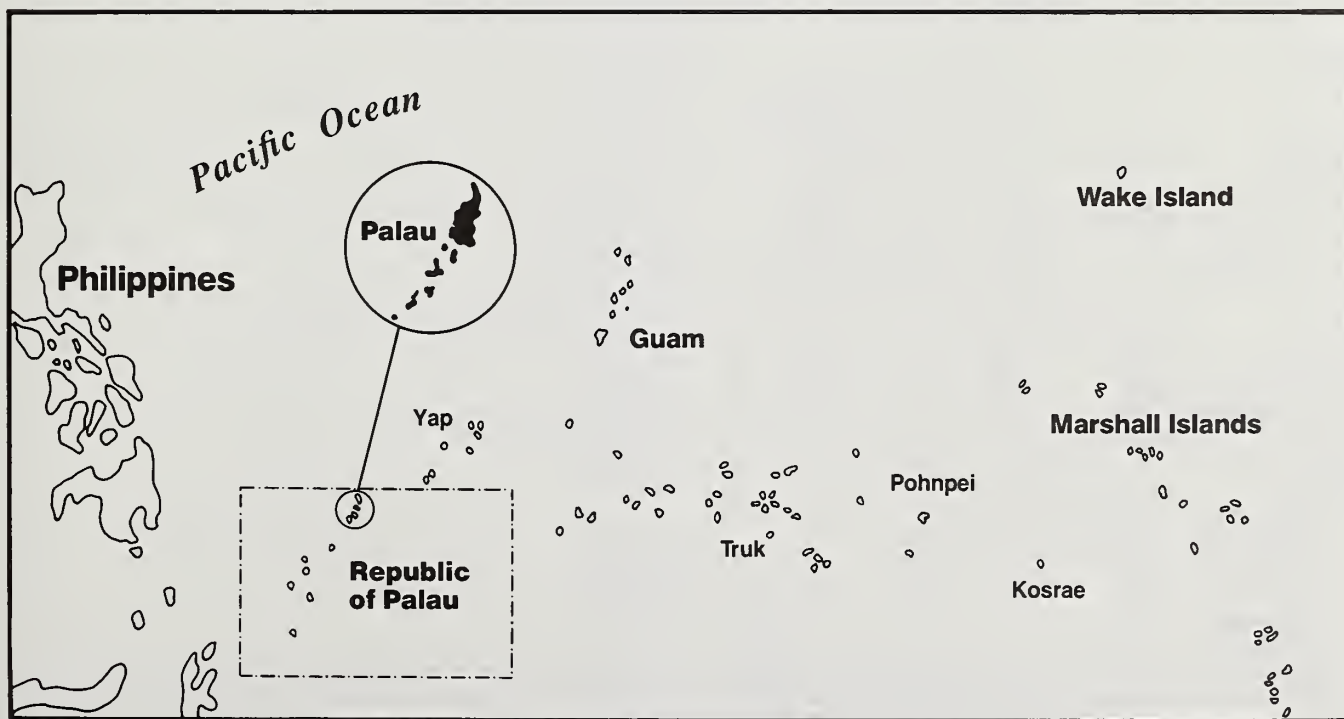


Figure 1—The Republic of Palau is located in the Western Caroline Islands.

located high island of Babelthuap (*tables 1 and 2, figs. 1, 2 and 3*). Babelthuap and the other high islands of the Republic—Malakal, Ngerekebesang, and Koror—(*table 3*) are characterized by low, rolling hills, coastal bottomlands, and tidal flats. Maximum elevation is about 215 m (700 ft).

Thirty-eight smaller islands were also surveyed during the project. Peleliu and Angaur, the two major islands to the south, are raised coral islands with jagged hills and level coastal areas (*table 4*). Much of the native vegetation on these two islands was destroyed during World War II, although remnants of limestone forest can still be found in the hills. Secondary vegetation, commonly found after disturbance, grows on 50 percent of the land area of Peleliu and on 68 percent of Angaur.

The famed Rock Islands of Palau are extremely steep, coralline limestone islands, typically undercut along the water's edge. They occupy the area from Koror Island south to the island

of Peleliu. We actually surveyed only one-fifth of the Rock Islands due to incomplete aerial photography. A summary of the vegetation found on 35 Rock Islands is found in *table 5* and a detailed breakdown by island and state, in *table 6A-C*.

Palau is hot and humid. The mean annual temperature of Koror, the capitol, is 27 °C (81 °F), with a mean annual rainfall of 3,730 mm (147 in). Rainfall varies little from month to month—February, March, and April are slightly drier than average. Relative humidity of the area averages about 90 percent at night and from 75 to 80 percent during the day. The average diurnal range of temperatures is 7 °C (12 °F). Although Palau lies outside the main paths of severe tropical disturbances and typhoons, such storms with high winds occasionally hit the islands, causing damage to crops, trees, and dwellings. In March 1967, the most destructive storm recorded struck with winds of 117 kph (73 mph).

Table 1—Area of Republic of Palau by island group, land class and type, 1979

Land class and type	Symbol	Island Group				Total
		Babel- thuap	Other high islands	Coral Islands	Rock Islands	
		<i>Hectares (acres)</i>				
Forest						
Upland forest	UP	21,690	201	0	0	21,891 (54,093)
Swamp forest	SW	1,617	15	47	1	1,680 (4,151)
Mangrove forest	MN	4,025	205	435	43	4,708 (11,633)
Plantation forest	PF	24	2	0	0	26 (64)
Rock Island forest	RI	104	210	0	802	1,116 (2,758)
Limestone forest	LI	0	0	1,175	57	1,232 (3,044)
Casuarina forest	CA	0	0	451	0	451 (1,114)
Atoll forest	AT	0	0	97	58	155 (383)
Palm forest	PO	0	<1	0	0	<1 (1)
Total forest		27,460	633	2,205	961	31,259 (77,241)
Secondary vegetation	SV	515	79	131	2	727 (1,796)
Agroforest						
Agroforest	AG	8	0	2	6	16 (40)
Agroforest (w/coconut)	AG.CO	173	6	100	0	279 (689)
Coconut plantation	CO	743	0	0	71	814 (2,011)
Total agroforest		924	6	102	77	1,109 (2,740)
Nonforest						
Marsh, fresh	M.F	448	<1	27	0	475 (1,174)
Marsh, cultivated	M.C	107	2	25	0	134 (331)
Marsh, saline	M.S	0	0	25	<1	25 (62)
Grassland	G	6,728	53	1	1	6,783 (16,761)
Strand	S	0	0	10	1	11 (27)
Cropland	C	140	59	4	0	203 (502)
Cropland/secondary vegetation	C/SV	0	28	0	0	28 (69)
Urban	U	141	222	33	1	397 (981)
Urban/cropland	U/C	106	70	0	0	176 (435)
Urban/agroforest	U/A	0	0	61	0	61 (151)
Urban/secondary vegetation	U/SV	0	3	0	0	3 (70)
Barren	B	149	5	26	0	180 (445)
Water	W	15	9	17	7	48 (119)
Total nonforest		7,834	451	229	10	8,524 (21,063)
Total area		36,733	1,169	2,667	1,050	41,619 (102,840)

Table 2—Area of forest land, by size and density classes, Babelthuap Island, Republic of Palau, 1979

Type	Size class ¹	Density classes ²			Total
		Low	Medium	High	
		<i>Hectares (acres)</i>			
Upland Forest	0	0	6	639	645 (1,593)
Upland Forest	1	246	424	15,791	16,461 (40,677)
Upland Forest	2	3	638	3,943	4,584 (11,326)
Swamp Forest	0	0	2	2	4 (9)
Swamp Forest	1	357	705	347	1,409 (3,481)
Swamp Forest	2	88	65	51	204 (505)
Mangrove	0	0	0	459	459 (1,134)
Mangrove	1	5	0	3,395	3,400 (8,401)
Mangrove	2	0	0	166	166 (411)
Rock Island Forest	1	0	0	103	103 (255)
Rock Island Forest	2	0	0	1	1 (2)
Plantation Forest	1	0	0	24	24 (60)
Total forest land		699	1,840	24,921	27,460 (67,854)

¹0—Short, shrub-like trees smaller than 12.5 cm in d.b.h.

1—Trees averaging less than 30 cm in d.b.h., but larger than 12.5 cm in d.b.h.

2—Trees averaging 30 cm or more in d.b.h.

²Crown closure of main canopy: low <30 pct; medium 30-70 pct; high >70 pct.

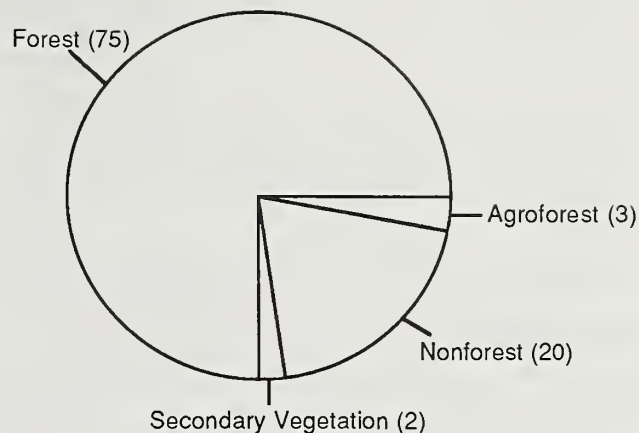


Figure 2—Areal percentages of land classes, Republic of Palau, in 1979.

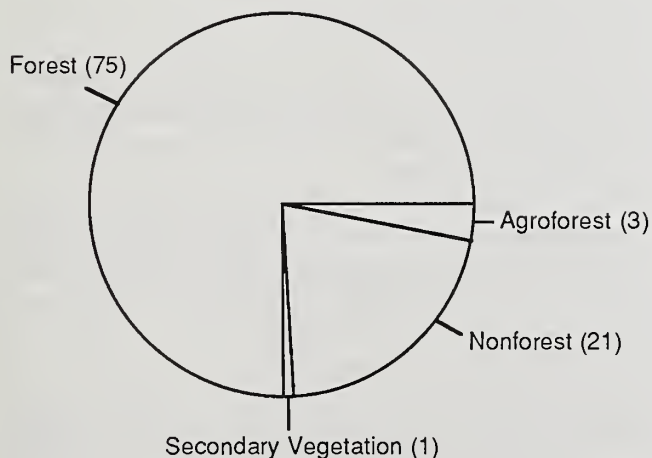


Figure 3—Areal percentages of land classes, Republic of Palau in 1979 show that the forest class is by far the largest. Eighty-six percent of the nonforest class or 18 percent of the total land area of Babelthuap Island is grassland.

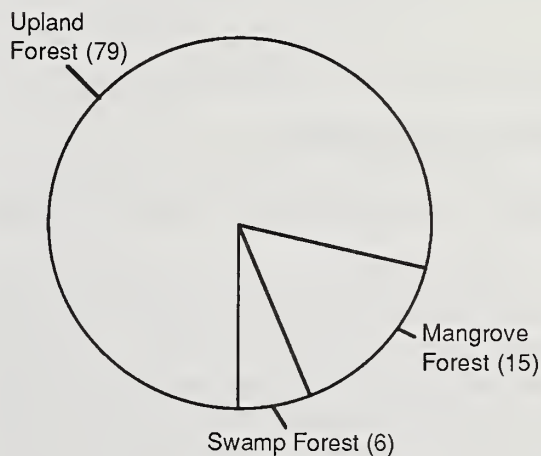


Figure 4—Percentages of land area in the major forest types, Babelthuap Island, Republic of Palau, 1979. The plantation and Rock Island forest types comprise less than 1 percent of the total area.

Table 3—Area of the high islands of Koror, Malakal, and Ngerekebesang, Republic of Palau, by island, land class, and type, 1979

Land class and type	Symbol	Island			Total
		Koror	Malakal	Ngerekebesang	
		<i>Hectares (acres)</i>			
Forest					
Upland forest	UP	56	26	119	201 (497)
Swamp forest	SW	15	0	0	15 (37)
Mangrove forest	MN	189	0	16	205 (507)
Plantation forest	PF	2	0	0	2 (5)
Rock Island forest	RI	206	3	1	210 (519)
Palm forest	PO	<1	0	0	<1 (1)
Total forest		468	29	136	633 (1,564)
Secondary vegetation	SV	54	11	14	79 (195)
Agroforest					
Agroforest (w/coconut)	AG.CO	0	0	6	6 (15)
Total agroforest		0	0	6	6 (15)
Nonforest					
Marsh, fresh	M.F	0	0	<1	<1 (1)
Marsh, cultivated	M.C	2	0	0	2 (5)
Grassland	G	9	2	42	53 (131)
Cropland	C	47	0	12	59 (146)
Cropland/secondary vegetation	C/SV	28	0	0	28 (69)
Urban	U	146	38	38	222 (548)
Urban/cropland	U/C	70	0	0	70 (173)
Urban/secondary vegetation	U/SV	3	0	0	3 (7)
Barren	B	0	5	0	5 (12)
Water	W	9	<1	0	9 (22)
Total nonforest		314	45	92	451 (1,114)
Total area		836	85	248	1,169 (2,888)

SURVEY METHODS

Palau's vegetative types were identified and delineated on photographs taken in 1976, at a scale of 1:10,000. The minimum area mapped during the project was 0.4 ha (1 acre). Updating the photos to account for recent changes was not possible. Field work in 1985, however, showed that the vegetation maps are fairly accurate.

Vegetation types were identified by examining the photos stereoscopically for differences in tone, texture, and pattern. In some cases, individual species were recognized by their distinctive shapes. The accuracy of the vegetative typing depended on the age and quality of the photographs, the skill and training of the photo interpreter, and on comparisons of potential types to actual field characteristics.

Before mapping could begin, a vegetative mapping scheme was needed. Since much of the islands are inaccessible by road

and because funds were limited, the types defined were restricted to those easily interpreted without intensive ground checking. Type characteristics delineated were limited to those useful to foresters and land-use planners.

After field reconnaissance, the vegetation coding system presented in this bulletin was adopted. The photos were then edited and sent to the Engineering Geomtronics Section of the Forest Service's Pacific Southwest Regional Office, for transfer to base maps and for measurement of type areas.

TYPE CLASSIFICATIONS

For mapping purposes, the islands of Palau were divided into four major land classes—forest, secondary vegetation, agroforest, and nonforest.

Table 4—Area of the coral islands of Peleliu, Angaur, Kayangel, Republic of Palau, by island, land class, and type, 1979

Land class and type	Symbol	Island			Total
		Peleliu	Anguar	Kayangel	
		————— <i>Hectares (acres)</i> —————			
Forest					
Swamp forest	SW	38	9	0	47 (116)
Mangrove forest	MN	435	0	0	435 (1,075)
Limestone forest	LI	587	588	0	1,175 (2,903)
Casuarina	CA	404	47	0	451 (1,114)
Atoll	AT	1	51	45	97 (240)
Total forest		1,465	695	45	2,205 (5,448)
Secondary vegetation	SV	96	31	4	131 (324)
Agroforest					
Agroforest	AG	2	0	0	2 (5)
Agroforest (w/coconut)	AG.CO	0	0	100	100 (247)
Total agroforest		2	0	100	102 (2,298)
Nonforest					
Marsh, fresh	M.F	27	0	0	27 (67)
Marsh, cultivated	M.C	16	9	0	25 (63)
Marsh, saline	M.S	25	0	0	25 (63)
Grassland	G	0	<1	1	1 (3)
Strand	S	2	0	8	10 (25)
Cropland	C	3	0	1	4 (10)
Urban	U	26	7	<1	33 (82)
Urban/agroforest	U/C	10	51	0	61 (151)
Barren	B	13	13	0	26 (64)
Water	W	13	4	<1	17 (42)
Total nonforest		135	84	10	229 (566)
Total area (coral islands)		1,698	810	159	2,667 (6,590)

Forest—The forest class consists of eight types of areas vegetated with live trees. The Rock Island forest type is a subtype of limestone forest.

Upland forest (UP)

Swamp forest (SW)

Mangrove forest (MN)

Atoll forest (AT)

Casuarina forest (CA)

Limestone forest (LI)

Rock Island forest subtype (RI)

Plantation forest (PF)

Palm forest (PO)

Secondary vegetation (SV)—Secondary vegetation includes vines, shrubs, and small trees on recently disturbed areas. In Palau, *Macaranga carolinensis* and *Bambusa* spp. are important components of secondary vegetation.

Agroforest (AG)—The agroforest class is made up of areas under cultivation for fruit and other food crops, and trees and wood products. Primary types in this class are:

Agroforest with coconuts (AG.CO)

Coconut plantation (CO)

Nonforest—Nonforest areas consist of lands that have never supported forests or are currently developed for nonforest uses. Seven types are included:

Marsh (M)

Grassland or savanna (G)

Strand (S)

Cropland (C)

Urban (U)

Barren (B)

Water (W)

The forest class and coconut plantation type were further subdivided into size and density classes (table 2), identified by these codes:

Code	Size class
0	Short, shrub-like stands smaller than 12.5 cm (5 in) in diameter at breast height (d.b.h.)
1	Trees averaging less than 30 cm (12 in) in d.b.h., but larger than or equal to 12.5 cm (5 in) in d.b.h.
2	Trees averaging 30 cm (12 in) or more in d.b.h.
Code	Density class
H	High—crown closure of main canopy greater than 70 percent.
M	Medium—crown closure of main canopy between 30 and 70 percent.
L	Low—crown closure of main canopy less than 30 percent.

On the folded maps, vegetative areas are numbered and identified by symbols in the legend. In each code, the vegetation type is shown first, followed by the size class and density class. For example, MN1H would indicate mangrove between 12.5 cm (5 in) and 30 cm (12 in) in diameter with a dense crown closure. Where possible, predominant species are identified. In such cases, the type code is followed by a period, followed by the first letter of the genus name, as in MN1H.S when *Sonneratia* makes up at least 20 percent of the mangrove stand. Occasionally, two-storied stands have been identified, usually with a sparse main canopy and an understory of secondary vegetation. For example, UP2L/SV.H would indicate a scattered overstory of upland species overtopping secondary vegetation (table 7) that is at least 20 percent *Hibiscus*.

VEGETATION TYPE DESCRIPTIONS

A detailed description of the primary types found in each of the major land classes is listed below. Classes are described by habitat and major overstory and understory species. A partial list of Palauan plant species is presented in table 8.

Forest

Although the Palauan islands at one time may have been completely covered with native forest, they are now only 75 percent forest. Most of the remaining land is classed as grassland, agro-

Table 5—Area of selected Rock Islands, Republic of Palau, by State, land class, and type. 1979

Land class and type	Symbol	State				Total
		Airai	Koror	Ngerechelong	Peleliu	
<hr/> <i>Hectares (acres)</i> <hr/>						
Forest						
Rock Island forest	RI	191	593	0	18	802 (1,982)
Mangrove forest	MN	1	0	2	40	43 (106)
Limestone forest	LI	0	0	0	57	57 (141)
Swamp forest	SW	0	0	0	1	1 (2)
Atoll	AT	0	0	0	58	58 (143)
Total forest		192	593	2	174	961 (2,375)
Secondary vegetation	SV	2	0	0	0	2 (5)
Agroforest						
Agroforest	AG	0	0	0	6	6 (15)
Coconut	CO	0	0	6	65	71 (175)
Total agroforest		0	0	6	71	77 (190)
Nonforest						
Strand ¹	S	0	0	0	1	1 (2)
Urban	U	0	1	0	0	1 (2)
Grassland	G	0	1	0	0	1 (2)
Water	W	1	6	0	0	7 (17)
Total nonforest		1	8	0	1	10 (24)
Total area		195	601	8	246	1,050 (2,595)

¹Includes 0.4 ha of saline marsh.

forest, or secondary vegetation. Almost all of the agroforest and secondary vegetation was once forest land, but the origins of the grasslands are less sure. During the Japanese administration (1914–1945), large areas in southern Babelthuap were cleared of native forest for pineapple and sugar cane fields. During the same period, bauxite mining in Ngardmau State, on the northwest coast destroyed native forest. Whatever their origins, however, most of the grassland area is not yet too eroded and infertile to support forest growth.

Upland Forest (UP)

Upland forests are found on the volcanic, high islands of Babelthuap, Malakal, Koror, and Ngerekebesang. Most of the other islands of Palau are limestone or coral and support limestone, rock island, or atoll forest types.

The upland forests of Palau are the most species diverse in Micronesia, and include a number of species endemic to Palau. While many interesting ecological communities are present within the upland forests they could not be consistently identified on the photographs, and therefore were not mapped.

One of the most common tree species found in Palau, as in the rest of the Caroline Islands, is *Camptosperma brevipetiolata*. It is usually found growing at elevations less than 150 m (500 ft) on flat or gently sloping sites and along rivers and streams. Other major species found in Palau's upland forests include *Parinari corymbosa*, *Alphitonia carolinensis*, *Rhus taitensis*, *Elaeo-*

carpus carolinensis, *Serianthes kanehirae*, *Semecarpus venenosus*, *Calophyllum inophyllum*, *Gmelina palawensis*, and *Pterocarpus indicus*. Many other tree species occupy the upper canopy in Palauan upland forests.

Species commonly found in the understory of Palau's forests include palms, especially *Pinanga insignis* and other plants, including *Pandanus aimiriikensis*, *Ixora casei*, *Eugenia cuminii*, *Osmoxylon oliveri*, *Manilkara udoido*, *Symplocos racemosa*, and *Cyathea lunulata*.

Swamp Forest (SW)

Swamp forests occur where soils are inundated with fresh or slightly brackish water. The most common habitat for such forests is in low lying areas, just inland of mangroves, above tidal influences. Coastal lowland swamps of Palau are generally quite disturbed, with *Hibiscus tiliaceus* being a common component after disturbance. Taro cultivation is a common competing land use for these swamp areas and is probably the main reason for the clearing of swamp forest.

In Palau, species common to swamps on the landward side of mangroves and along rivers include *Horsfieldia amklaal*, *Cynometra ramiflora*, *Calophyllum soulattri*, *Barringtonia racemosa*, *Heritiera littoralis*, *Samadera indica*, and in the understory, *Stemonurus ammu*. The climbing vine *Derris trifoliata* is commonly found growing on trees.

A swamp forest association which is common to low areas of

impeded drainage is the *Horsfieldia amklaal*, *Barringtonia racemosa*, and *Donax caniformis* type, first described by Hosokawa (1952). This type of swamp forest is not restricted to coastal areas but is quite commonly found along streams in the interior hills of Babelthuap. *Horsfieldia* trees in these upland swamp areas occasionally attain diameters over 100 cm (39 in).

Some remnants of swamp forest occur on Peleliu. Species commonly found in these wet areas are *Barringtonia racemosa* and *Terminalia catappa*. On Angaur, *Barringtonia racemosa*, *Hibiscus tiliaceus*, and *Areca catechu* (betelnut) grow in a swampy area that remains near the airstrip.

Mangrove Forest (MN)

In mangrove forests, tree roots are periodically inundated with sea water. They serve as a natural filtering and nutrient buffering system between high islands and lagoons, settling silt and providing a slow sustained release of nutrients into the lagoon. Mangroves also serve as fish spawning grounds and habitat for birds and fruit bats, and provide lumber, firewood, and fisheries.

In Palau, the mangrove forest type occurs along lower portions of rivers and their mouths, on coastal mud flats, and on some offshore islets. Where well developed, stands may reach 15 to 20 m (50 to 70 ft).

Although large mangrove trees can be found, Palauan mangroves typically grow in stands of medium-sized trees (MN1). In the interior of large mangrove areas, however, dense stands of short, small trees may be found (MN0)—especially in areas where the water circulation is limited and the soil is relatively firm. The presence of a hard-pan layer of organic material is probably responsible for the stunted growth. *Rhizophora* spp. predominate in MN0 stands but *Bruguiera gymnorrhiza* is occasionally found. Individual trees are typically 2 to 3 m (7 to 10 ft) tall and less than 8 cm (3 in) in d.b.h.—too small to be usable for wood products.

Sonneratia alba and *Rhizophora mucronata* are dominant on the seaward side of the mangrove (Stemmermann and Proby 1978). At the mouths of larger rivers or around bay indentations, *Rhizophora mucronata* and *R. apiculata* may grow in pure stands or mixed with *Sonneratia* and some *Bruguiera*. On the landward side of mangroves, the species mix may include *Lumnitzera littorea* and *Xylocarpus granatum*. Where estuaries become river-like, *Rhizophora* spp. are rarely found, *Sonneratia* remains common, and *Bruguiera*, *Xylocarpus*, and *Lumnitzera* become common.

Heritiera littoralis is found along the landward side of mangroves and upstream. Stands of *Nypa fruticans* occur along the lower portions and mouths of some rivers. Although *Nypa* palm is fairly common, it generally grows in stringers too narrow to map.

The mangroves of Babelthuap Island are well developed, especially on the south and southwest coasts. The mangroves of Peleliu Island are generally stunted and less dense than those of Babelthuap. One mangrove stand is in Kayangel Atoll, along the shore of a saltwater pond in the interior of a small islet adjacent to Kayangel Island proper. These *Bruguiera* and *Rhizophora* trees, now 5 to 6 m (16 to 20 ft) tall, were planted by the Palau Department of Agriculture and Forestry in the mid 1970's.

Atoll Forest (AT)

The atoll forest type generally is found towards the interior of larger and wetter uninhabited atolls and along sandy or rocky coasts of high islands. Although generally located behind the strand, atoll forest species are often mixed with the strand species, so the transition from strand to atoll forest is often gradual and indefinite.

Species commonly found in atoll forests include an outer fringe of shrubby *Scaevola taccada*, occasionally with *Tournefortia argentea* and *Sophora tomentosa*. On rocky coasts, *Pemphis acidula* is common. Both *Tournefortia* and *Pemphis* grow into small well-formed trees. Tall *Casuarina litorea* trees may be present, especially along the leeward shore. Other species include *Calophyllum inophyllum*, *Cordia subcordata*, *Hermandia sonora*, *Guettarda speciosa*, *Pandanus* spp., *Pisonia grandis*, *Terminalia catappa*, *Morinda citrifolia*, *Neisosperma oppositifolia*, *Hibiscus tiliaceus*, *Ficus* spp., and *Premna obtusifolia*.

Human activity has altered the vegetation throughout Micronesia. Agroforest now predominates on most atolls, especially the inhabited ones. Atoll forest has largely disappeared except on uninhabited atolls and sandy or limestone coasts.

Casuarina Forest (CA)

In a number of places, especially along coastal areas of Peleliu and Angaur, dense stands of *Casuarina litorea* trees can be found. Although such areas are not well-developed forest communities, they are distinct on aerial photos and readily identified. Where such stands exist, the ground is covered with a thick carpet of fallen needles. This layer of needles tends to inhibit other growth, resulting in the habitat characteristic of *Casuarina* stands. Larger, relatively pure stands of *Casuarina* trees are delineated as CA1H. Where sparse in density, *Casuarina* may also be a component of other types such as atoll forest (AT), limestone forest (LI), or secondary vegetation (SV).

Limestone Forest (LI)

This is a vegetation type found mainly on the coral islands of Peleliu, Angaur, and the Rock Islands. The species composition of LI varies on the different islands, there being a number of endemic species present. The limestone forest habitat, however, is similar on all islands, supporting both scrubby and tall trees sometimes growing out of bare rock. The humus from decaying leaves and other debris provide a sustained cycling of nutrients. Species commonly found in the limestone forest include *Intsia bijuga*, *Psychotria* spp., and *Clerodendrum inerme*.

Native limestone forest once covered much of Peleliu. However, the vegetation of the island was greatly disturbed during World War II. Less disturbed limestone forest occurs in the mountainous regions of northern Peleliu. Species of this vegetation type, however, are common and can be found scattered throughout the island, and in the secondary vegetation type as well. On Angaur, areas of limestone forest are found interspersed among freshwater, and occasionally, saltwater depressions. These areas are coded LI.SW to indicate the swamp-like condition of the understory. Occasionally, sites are found where

limestone forest and *Casuarina* trees (LI.CA) or atoll forest (LI.AT) species grow together (table 4).

Rock Island Forest (RI)

The Rock Islands of Palau are coralline limestone islands, typically vegetated with Rock Island forest. This forest type is considered a subtype of the limestone forest type (LI), but was mapped separately to indicate the uniqueness of the Rock Islands. In all, 1,117 hectares (2,760 acres) of Rock Island forest

Table 6A—Area by vegetation type for selected Rock Islands, State of Airai, Republic of Palau, 1979

Island	Vegetation type					Total area
	Rock Island forest (RI)	Mangrove forest (MN)	Total forest	Secondary vegetation (SV)	Water	
	<i>Hectares (acres)</i>					
Chesechosou	10	0	10	0	0	10 (25)
Diebebal	2	0	2	0	0	2 (5)
Ngedert	2	0	2	0	0	2 (5)
Ngeream	171	1	172	2	<1	174 (430)
Ngkesill	2	0	2	0	0	2 (5)
Omelochel	4	0	4	0	0	4 (10)
Total area	191	1	192	2	<1	194 (479)

Table 6B—Area by vegetation type for selected Rock Islands, State of Koror, Republic of Palau, 1979

Island	Vegetation type			Total area
	Rock Island forest (RI)	Grassland (G)	Urban (U), Water (W)	
	<i>Hectares (acres)</i>			
Bukrrairong	13	0	0	13 (32)
Itelblong	6	0	0	6 (14)
Meduu	4	0	0	4 (9)
Ngedesakr	6	0	0	6 (15)
Ngerbechetel	2	0	0	2 (4)
Ngerchaol	71	0	1	72 (179)
Ngermalk	23	0	1	24 (60)
Ngermechaech	1	0	0	1 (3)
Ngeretecheif	2	0	0	2 (4)
Ngerur	5	0	0	5 (13)
Ngeteklou	47	0	2	49 (120)
Ngetkuml	2	0	0	2 (4)
Ordachel	6	0	0	6 (14)
Tengetcheyangl	1	0	0	1 (3)
Torius	3	0	0	3 (7)
Ucheliungs	2	0	0	2 (6)
Uchulangas	2	0	0	2 (5)
Ulebsechl	394	1	3	398 (985)
Ullemetamel	4	0	0	4 (9)
Total area	594	1	7	602 (1,486)

Table 6C—Area by vegetation type for selected islands, States of Ngerechelong and Peleliu, Republic of Palau, 1979

State and island	Vegetation type								Total area
	Rock island forest (RI)	Mangrove forest (MN)	Limestone forest (LI)	Atoll forest (AT)	Total forest	Agro-forest (AG)	Coco-nut (CO)	Marsh and strand (M)(S)	
	<i>Hectares (acres)</i>								
Ngerechelong									
Ngerkeklaui	0	2	0	0	2	0	6	0	8 (19)
Peleliu									
Belualasmau	0	0	0	2	2	0	0	0	2 (6)
Ngebad	0	¹ 11	41	4	56	0	0	1	57 (141)
Ngedbus	0	6	0	24	30	0	65	0	95 (234)
Ngerumetochel	18	0	0	0	18	0	0	0	18 (45)
Ngesuall	0	0	2	0	2	0	0	0	2 (4)
Ngurungor	0	10	15	0	25	0	0	0	25 (62)
Olungeaol	0	9	0	28	37	0	0	0	37 (92)
Ruriid	0	4	0	0	4	6	0	0	10 (25)
Tengabardl	0	1	0	0	1	0	0	0	1 (2)
Total area	18	43	58	58	177	6	71	1	255 (630)

¹Includes <1 ha of swamp forest (SW).

Table 7—Vegetation type codes used for the islands in the Republic of Palau¹

Land class	Vegetation codes	Vegetation types, subtypes and components	Land class	Vegetation codes	Vegetation types, subtypes and components
Forest	UP	Upland forest, various size and density classes apply	Secondary vegetation	SV	Secondary vegetation, size and density do not apply
	UP/SV	Secondary vegetation understory		SV.BB	Bamboo component
	UP/SV.BB	Bamboo understory		SV.G	Grass component
	UP/SV.G	Grass understory		SV.S	Shrub component
	UP.CO	Coconut component		SV.H	<i>Hibiscus</i> component
	UP.CO/SV	Coconut component, secondary vegetation understory	Agroforest	AG	Agroforest
	UP.SW	Swamp forest component		AG.CO	Coconut component
	UP.PO	Palm forest component		AG.CO/M.F	Coconuts with freshwater marsh understory
	UP/C	Cultivated inclusions		AG.CO/U	Coconuts with urban inclusions
	SW	Swamp forest, various size and density classes apply		CO	Coconut plantation, various size and density classes apply
	SW.B	<i>Barringtonia</i> component		CO.SW	Swamp forest component
	SW/SV	Secondary vegetation understory		CO.UP	Upland forest component
	SW/SV.BB	Bamboo understory		CO/U	Urban inclusions
	SW.CO	Coconut component		CO/SV	Secondary vegetation understory
	SW.CO/SV	Coconut component, secondary vegetation understory		CO/M.F	Freshwater marsh understory
	SW.UP	Upland forest component	Nonforest	M.F	Freshwater
	MN	Mangrove, various size and density classes apply		M.F.C	Freshwater, cultivated
	MN.R	<i>Rhizophora</i> component		M.F.P	Freshwater, <i>Phragmites</i>
	MN.SW	Swamp forest component		M.F/SV	Freshwater marsh with secondary vegetation inclusions
	MN.AT	Atoll forest component		M.S	Marsh, saline
	MN.N	<i>Nypa</i> palm component		G	Grassland or savanna
	MN/SV	Secondary vegetation understory		G.B	Barren component
	MN.D	Evidence of disturbance		G.CA	Abandoned cultivation
	AT	Atoll forest, various size and density classes apply		G.D	Disturbed lands
	AT/SV	Secondary vegetation understory		G.F	Fern component
	AT.LI	Limestone forest component		G.G	Grass component
	AT.CA	<i>Casuarina</i> component		G.P	Pandanus component
	AT.CO	Coconut component		G.S	Shrub component
	PF	Plantation forest, various size and density classes apply		S	Strand vegetation
	PF.M	Mahogany plantation		C	Cropland
	LI	Limestone forest, various size and density classes apply		C/SV	Cropland with secondary vegetation inclusions
	LI/SV	Secondary vegetation understory		U	Urban land
	LI.SW	Swamp forest component		U/AG	Agroforest inclusions
	LI.CA	<i>Casuarina</i> component		U/C	Cropland inclusions
	LI.CO	Coconut component		U/SV	Secondary vegetation inclusions
	RI	Rock Island forest, a sub-type of limestone forest, various size and density classes apply		U/SV.BB	Bamboo inclusions
	CA	<i>Casuarina</i> forest, various size and density classes apply		B	Barren land
	CA/SV	Secondary vegetation understory		B.CL	Clay soil patches
	CA.AT	Atoll forest component		B.D	Disturbed
	CA.LI	Limestone forest component		B.R	Rock outcrops
	PO.I	Palm forest, various size and density classes apply, Ivory Nut palm component		B.S	Sand
				W.F	Freshwater
				W.S	Saline water

¹NOTES:

Size classes and density codes are used only with the forest class and with the coconut plantation type.

Various combinations of components are used, especially within the grassland type, as for G.B.F.P or grassland with barren, fern, and pandanus components.

Each component, inclusion, or understory species identified must be present on at least 20 percent of the mapped area.

Table 8—Partial list of plant species found on Palau¹

Genus	Species	Author	Family
Acrostichum	aureum	L.	Pteridaceae
Alphitonia	carolinensis	Hosoka	Rhamnaceae
Areca	catechu	L.	Palmae
Artocarpus	spp.		Moraceae
Bambusa	vulgaris	Schrader	Gramineae
Barringtonia	racemosa	(L.) Spreng.	Lecythidaceae
Bikkia	palauensis	Val.	Rubiaceae
Bruguiera	gymnorhiza	(L.) Lamarck	Rhizophoraceae
Calophyllum	inophyllum	L.	Guttiferae
Calophyllum	soulattri	Burm. f.	Guttiferae
Campnosperma	brevipetiolata	Volkens	Anacardiaceae
Casuarina	litorea	L.	Casuarinaceae
Clerodendrum	inermis	(L.) Gaertn.	Verbenaceae
Cocos	nucifera	L.	Palmae
Cordia	subcordata	Lamarck	Boraginaceae
Cyathea	lunulata	(Forst. f.) Copel.	Cyatheaceae
Cynometra	ramiflora	Schltr.	Gesneriaceae
Cyperus	javanicus	Houtt.	Cyperaceae
Decaspermum	spp.		Myrtaceae
Derris	trifoliata	Loureiro	Leguminosae
Donax	canniformis	(Forst. f.) Schum.	Marantaceae
Dracaena	multiflora	Warb. ex Sarasin	Agavaceae
Elaeocarpus	carolinensis	Koidz.	Tiliaceae
Eleocharis	geniculata	(L.) Roemr & Schultes	Cyperaceae
Eugenia	cuminii	(L.) Druce	Myrtaceae
Eugenia	spp.		Myrtaceae
Eurya	japonica	(Korth.) This.-Dyer	Theaceae
Ficus	spp.		Moraceae
Fimbristylis	cymosa	R. Br.	Cyperaceae
Garcinia	mangostana	L.	Guttiferae
Gleichenia	linearis	(Burm. f.) C.B.CL	Gleicheniaceae
Gmelina	palawensis	H. J. Lam	Verbenaceae
Guettarda	speciosa	L.	Rubiaceae
Gulubia	palauensis	(Becc.) Moore & Fosb.	Palmae
Heritiera	littoralis	Dry.	Sterculiaceae
Hernandia	sonora	L.	Hernandiaceae
Hibiscus	tiliaceus	L.	Malvaceae
Horsfieldia	amklaal	Kanehira	Myristicaceae
Intsia	bijuga	(Colebr.) O.Ktze.	Leguminosae
Ipomoea	aquatica	Forsskal, Fl.	Convolvulaceae
Ipomoea	pes-caprae	(L.) V. Ooststr.	Convolvulaceae
Ischaemum	chordatum	(Trin.) Hack. Warb.	Gramineae
Ixora	casei	Hance	Rubiaceae
Lippia	nodiflora	(L.) Rich.	Verbenaceae
Lumnitzera	littorea	(Jack) Voigt	Combretaceae
Macaranga	carolinensis	Volk.	Euphorbiaceae
Mangifera	indica	L.	Anacardiaceae
Manilkara	udoido	Kan.	Sapotaceae
Melastoma	malabathricum	(Naudin) Fosb. & Sachet	Melastomaceae
Metroxylon	amicarum	(Wendl.) Becc.	Palmae
Miscanthus	floridulus	(Labill.) Warb.	Gramineae
Morinda	citrifolia	L.	Rubiaceae
Musa	spp.		Musaceae
Neisosperma	oppositifolia	(Lam.) Fosb. & Sachet	Apocynaceae
Nephelium	lappaceum	L.	Sapindaceae
Nypa	fruticans	Wurmb.	Palmae
Osmoxylon	oliveri	Fosb. & Sachet	Araliaceae
Pandanus	aimiriikensis	Mart.	Pandanaceae
Pandanus	spp.		Pandanaceae
Parinari	corymbosa	(Bl.) Miq.	Rosaceae
Paspalum	distichum	L.	Gramineae
Pemphis	acidula	Forst.	Lythraceae
Phragmites	karka	(Retz.) Trin. ex Steud.	Gramineae
Pinanga	insignis	Becc.	Palmae

continued

Table 8—Partial list of plant species found on Palau (continued)

Genus	Species	Author	Family
<i>Pisonia</i>	<i>grandis</i>	R. Brown	Nyctaginaceae
<i>Premna</i>	<i>obtusifolia</i>	R. Brown	Verbenaceae
<i>Psychotria</i>	spp.		Rubiaceae
<i>Pterocarpus</i>	<i>indicus</i>	Willd.	Leguminosae
<i>Ptychosperma</i>	<i>palauensis</i>	(Kaneh.) Moore & Fosb.	Palmae
<i>Rhizophora</i>	<i>apiculata</i>	Blume	Rhizophoraceae
<i>Rhizophora</i>	<i>mucronata</i>	Lamarck	Rhizophoraceae
<i>Rhus</i>	<i>taiensis</i>	Guillemin	Amacardiaceae
<i>Samadera</i>	<i>indica</i>	Graetn.	Simaroubaceae
<i>Scaevola</i>	<i>taccada</i>	(Gaertner) Roxburgh	Goodeniaceae
<i>Semecarpus</i>	<i>venenosus</i>	Volkens	Anacardiaceae
<i>Serianthes</i>	<i>kanehirae</i>	Fosb.	Leguminosae
<i>Sonneratia</i>	<i>alba</i>	J. E. Sm.	Sonneratiaceae
<i>Sophora</i>	<i>tomentosa</i>	L.	Leguminosae
<i>Stemonurus</i>	<i>ammui</i>	(Kaneh.) Sleumer	Icacinaceae
<i>Swietenia</i>	<i>macrophylla</i>	King	Meliaceae
<i>Swietenia</i>	<i>mahagoni</i>	(L.) Jacq.	Meliaceae
<i>Symplocos</i>	<i>racemosa</i>	(Koidz.) Nooteb.	Symplocaceae
<i>Terminalia</i>	<i>catappa</i>	L.	Combretaceae
<i>Timonius</i>	<i>timon</i>	(Spr.) Merr.	Rubiaceae
<i>Tournefortia</i>	<i>argentea</i>	(L.f.) Johnston	Boraginaceae
<i>Vigna</i>	<i>marina</i>	(Burm.) Merrill	Leguminosae
<i>Wikstroemia</i>	<i>elliptica</i>	Merr.	Thymelaeaceae
<i>Xylocarpus</i>	<i>granatum</i>	Koenig	Meliaceae

¹Dicotyledonae follow Fosberg and others (1979) and Fosberg and others (1980).

Palm nomenclature follows that of Moore and Fosberg (1956).

were typed, representing only a fraction of the total area of the Rock Islands. Unfortunately, no photography was available for most of the Rock Islands.

The forest of the Rock Islands is diverse in species composition and varies among islands. Some of the more common species include the native palms *Gulubia palauensis* and *Ptychosperma palauensis*, and the forest trees *Semecarpus venenosus*, *Intsia bijuga*, *Psychotria* spp., *Premna obtusifolia*, *Cordia* spp., *Clerodendrum inerme*, and *Biklia palauensis*. *Pandanus* spp. and *Dracaena multiflora* are also common in the understory.

Plantation Forest (PF)

Forest plantations are planted for commercial forest production, erosion control, or conversion. The type is limited to experimental species introduction trials near the Nekkeng Forestry Station and to several small plantations, most of which were established during the Japanese era. Various introduced species include *Swietenia mahagoni*, *S. macrophylla*, *Pterocarpus indicus*, and the fruit trees *Nephelium lappaceum* (rambutan) and *Garcinia mangostana*.

Palm Forest (PO)

Although there are six native palms found in Palau, they usually occupy the understory or middle canopy layers of the forest, and do not occur in pure, mappable stands. The only palm forest stand located during the project was on Koror, a 0.4 hectare (1

acre) area of the introduced ivory nut palm (*Metroxylon amicorum*).

Secondary Vegetation

Areas of fast-growing small trees, shrubs, and vines growing in recently disturbed areas are classified as secondary vegetation. Such areas sometimes represent traditional gardens in a fallow phase. To some extent secondary vegetation functions as a natural "bandage" protecting disturbed soils from Palau's heavy rains, allowing humus and nutrients to accumulate in the soils.

On Palau's volcanic islands, *Macaranga carolinensis* is the usual component of secondary vegetation. *Bambusa* is also common. Generally, *Hibiscus tiliaceus* occurs more commonly on wetter sites, although it can be found growing elsewhere. The impenetrable *Hibiscus* thickets common to Pohnpei and Kosrae are not found here, except in some wetter areas.

The most common secondary vegetation species found on the limestone islands of Peleliu and Angaur are *Macaranga carolinensis* and the native limestone species, *Timonius timon*.

Agroforest

Agroforests occupy areas generally along the coast and near dwellings and are characterized by a mix of food-producing trees, forest trees, and other plants. These "tree gardens" rep-

resent a sustainable system of food production and wise use of available resources. The canopy is often uneven and may be interspersed with small taro patches, open canopy gardens, and areas of secondary vegetation—all too small to be mapped separately.

Agroforest with a crown cover of over 20 percent coconut trees (*Cocos nucifera*) is typed as AG.CO. Other species commonly present include breadfruit (*Artocarpus* spp.), mango (*Mangifera indica*), bananas (*Musa* spp.), *Eugenia* spp., and betelnut (*Areca catechu*).

Coconut Plantation (CO)

In Palau, coconut plantations—geometric grids of planted coconut palms—are relatively common. Most were established in the late 1800's by the Germans for copra production. On the island of Babelthuap—especially on the sandy east coast—these coconut plantations have been abandoned and are reverting to upland forest. Such areas are coded as either CO.UP or CO/SV, depending upon the size and composition of the associated vegetation.

Nonforest

Marsh (M)

Marsh areas are dominated by grasses, sedges, and herbs growing in standing water most of the year. A number of types of marshes are identified, including freshwater and saline:

- Marsh, freshwater (M.F)—Areas just slightly above sea level and surrounded by mangroves, as in the freshwater marsh/open canopy swamp forest category described by Stemmermann and Proby (1978), or in depressions in upland areas. The vegetation in these areas may include tall reeds, especially *Phragmites karka*, sedges, and other taller herbaceous growth. Where the water is somewhat brackish, the fern *Acrostichum aureum* may be present. Freshwater marshes cultivated for taro are coded M.F.C, and here the edible vine *Ipomoea aquatica* may be found.

- Marsh, saline (M.S)—Areas dominated by herbaceous vegetation growing in salt or brackish water conditions. Saline marshes are generally located along the coast, near mangroves or in depressions in sand or mud flats. Only 0.4 hectare (1 acre) of saline marsh, on Ngebad Island, was mapped. Other inclusions of saline marsh are too small for mapping. Common species include *Cyperus javanicus*, *Derris trifoliata* (especially at the edge of mangroves), *Eleocharis geniculata*, *Fimbristylis cymosa*, *Lippia nodiflora*, *Paspalum distichum*, and *Vigna marina*. A number of woody species characteristic of coastal sands, swamp forests, and mangroves may surround or be sparsely scattered in the marshes.

Grassland/Savanna (G)

Grasslands/savannas are areas of land supporting a layer of herbaceous, fern or low shrub cover. Tall shrubs and trees, if present, are widely scattered. The soils are generally poorly drained clays.

Some of the grasslands/savannas on Babelthuap are a result of human activity—land clearing, mining, or wildfire. Other grasslands/savannas may also be the result of past human disturbance or be a natural occurrence related to the presence of bauxite soils. In any event, the grasslands are maintained by frequent fires that destroy both vegetation and the humus layer of the soil. The combined effects of wind, sun, and heavy rain cause continuing erosion of the degraded soils, insuring that only adapted herbaceous and fern species will survive.

Five major subtypes of grasslands/savannas have been identified: bare, fern lands, grasslands, shrubs, and abandoned agriculture.

- Bare—Areas of patchy herbaceous growth—generally low grasses and sedges—on poor soils. Patches of bare soil are common (designated G.B).

- Fern lands—Areas in which predominant cover is a tangled mat of *Gleichenia linearis* fern (designated G.F). Such areas are subject to frequent burning and soils are generally heavy, infertile clays. On Babelthuap, this type often replaces the mix of native and introduced shrubs, *Pandanus* spp., and herbaceous vegetation that is characteristic of savanna in the western Caroline Islands.

- Grasslands—grasslands/savannas with a mixture of graminoid species (designated G.G) may include other associations such as ferns, shrubs, and pandanus. Graminoid species include *Ischaemum* spp. and *Miscanthus floridulus*.

- Shrubs—Areas with a mixture of shrubs (designated G.S). Species specific to grasslands/savannas include *Eurya japonica*, *Wikstroemia elliptica*, *Melastoma malabathricum*, and *Decaspermum* spp.

- Abandoned agriculture—Grasslands/savannas once under cultivation (designated G.CA). Where soils are not so degraded, a number of herbaceous species may be found. In Palau, the most common species is *Ischaemum chordatum*.

Strand (S)

The strand type includes herbaceous vegetation or shrubs growing along the ocean shore on a sandy or rocky substrate. This type is usually included with the atoll forest type, since the two are hard to separate. A total of 11 hectares (27 acres) of strand vegetation was mapped on Kayangel, Peleliu, and other small islands of Palau. Herbaceous species include *Vigna marina*, *Ipomoea pes-caprae*, and *Fimbristylis* spp. The small tree *Pemphis acidula* is also common.

Cropland (C)

Cropland is cultivated land without tree cover. Most of these gardens are too small to delineate and are included with other types such as agroforest or secondary vegetation.

Barren (B)

Areas lacking natural vegetation, for such reasons as presence of rocks and sterile soil, are delineated as barren. Many barren areas on Babelthuap Island are abandoned bauxite mines.

Urban (U)

Urban areas are those developed for nonforest, nonagricultural use. Where buildings, roads, or similar features are interspersed with vegetation, the area may be classified as urban/secondary vegetation (U/SV), urban/agroforest (U/AG), or urban/cropland (U/C).

Water (W)

Water includes both fresh water and saline pools (W.S).

GLOSSARY

Agroforest: Land where planted fruit trees and other agricultural plants are cultured among forest trees.

D.b.h.: Diameter at breast height. Tree diameter outside bark measured at breast height, 1.3 m above the ground.

Forest land: Land at least 10 percent stocked by live trees or land formerly having such tree cover and not currently developed for nonforest use.

Land area: Land area includes dry land and land temporarily or partially covered by water, such as marshes, swamps, and river flood plains.

Land class: A classification of land by major use or major vegetative characteristics, i.e., forest, secondary vegetation, agroforest, and nonforest.

Nonforest land: Land that has never supported forests; or was formerly forested, but is currently developed for nonforest use.

Secondary vegetation: A vegetation type characterized by small, fast-growing trees and vines, usually weedy invaders.

Vegetation type: An area delineated on the folded maps as having species composition similar to one of the types described in the section on type classification.

REFERENCES

- Fosberg, F. Raymond; Sachet, Marie-Helene; Oliver, Royce. **A geographical checklist of the Micronesian dicotyledonae.** *Micronesica* 15(1-2): 41-295; 1979.
- Fosberg, F. Raymond; Otobed, Demi; Sachet, Marie-Helene; Oliver, Royce; Powell, Dulcie A.; Canfield, Joan E. **Vascular plants of Palau with vernacular names.** Department of Botany, Smithsonian Institution, Washington DC; 1980. 43 p.
- Hosokawa, Takashide. **A synchrological study of the swamp forests in the Micronesian Islands.** *Mem. Fac. Sci. Kyushu Univ. Ser. E.* 1:101-123; 1952.
- Moore, Harold E.; Fosberg, F. Raymond. **The palms of Micronesia and the Bonin Islands.** *Gentes Herbarium* 8(6): 423-478; 1956.
- Stemmermann, Lani; Proby, Fred. **Inventory of wetland vegetation in the Caroline Islands.** Vol. I. Honolulu, HI: Pacific Ocean Division, U.S. Army Corps of Engineers; 1978. 231 p.



01

PALAU ISLANDS

Index Map

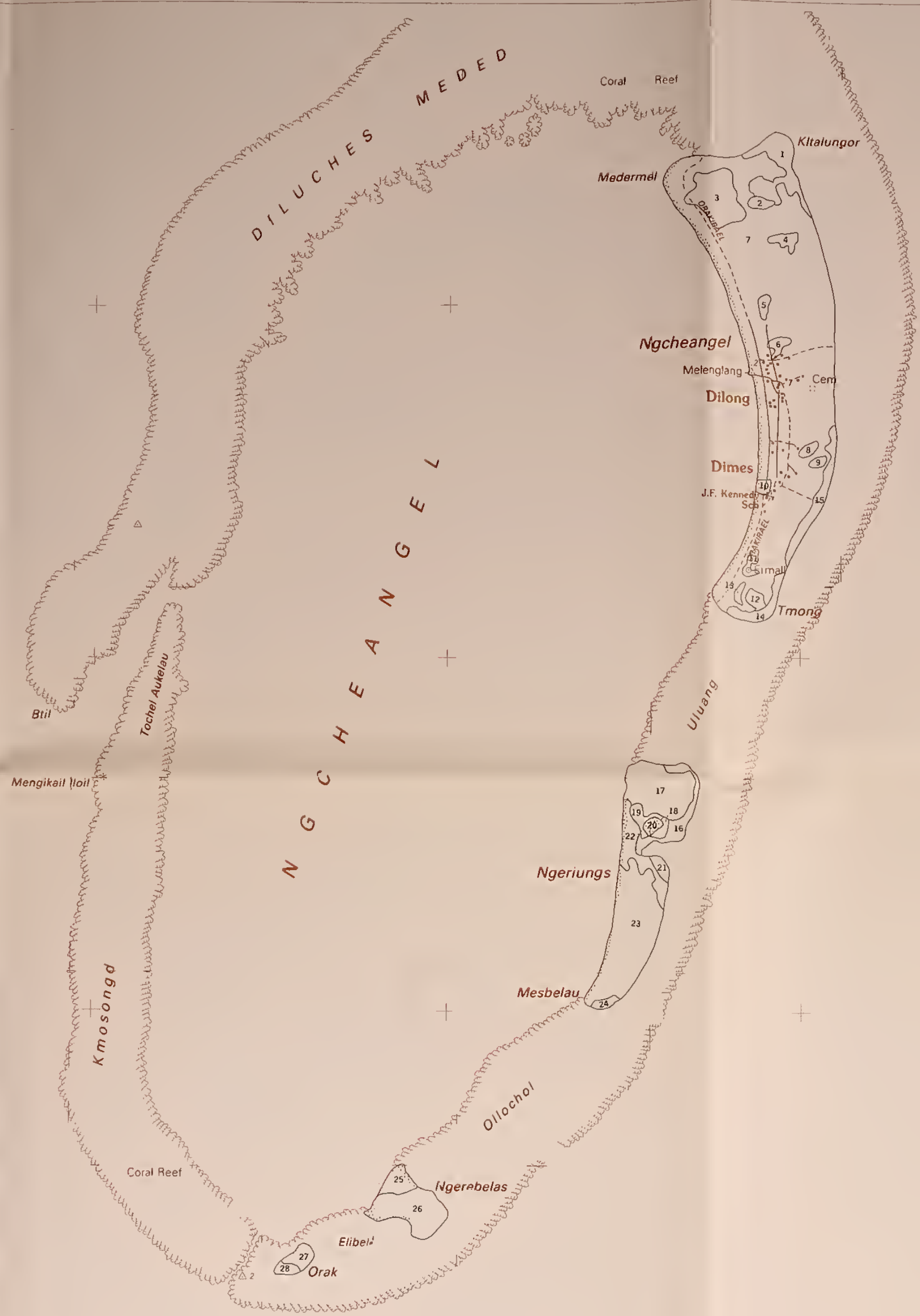


Sheet 1 of 17

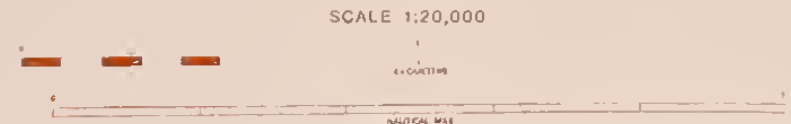
Cole, Thomas G., Falaruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22 Berkeley, CA Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 1987.

VEGETATION LEGEND
For explanation of vegetation type codes see Table 7.

ITEM	LABEL	AREA (ACRES) (HECTARES)	
1	AT1H	14	5.7
2	SV	2	8
3	AT1H	15	6.1
4	SV	2	8
5	C	1	4
6	C	2	8
7	AG CO	229	92.7
8	G CA	1	4
9	G CA	1	4
10	U	1	4
11	SV	2	8
12	SV	2	8
13	SV	1	4
14	AT1H	5	2.0
15	S	8	3.2
16	S	8	3.2
17	AT1H	20	8.0
18	AG CO	1	4
19	SV S	2	8
20	W	1	4
21	S	2	8
22	AG CO	9	3.6
23	AT1H/SV	38	15.3
24	S	2	8
25	AG CO AT	5	2.0
26	AT1H	16	6.4
27	AG CO	3	1.2
28	AT1H	2	8



Some maps prepared from US Geological Survey topographic maps
and maps prepared by USDA Forest Service Pacific
Forest Region, San Francisco, California



Vegetation map compiled by Pacific Southwest Forest and Ranger
Experiment Station and Pacific Northwest Forest and Ranger
Experiment Station, Forest Service, U.S. Department of Agriculture
Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomorphics Section, 1987.

PALAU ISLANDS

Index Map



Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA. Pacific Southwest Forest and Range Experiment Station Forest Service, U.S. Department of Agriculture, 1987



VEGETATION LEGEND

For explanation of vegetation type codes see Table 7.

AREA			AREA		
ITEM	LABEL	(ACRES) (HECTARES)	ITEM	LABEL	(ACRES) (HECTARES)
BABELTHUAP					
1	MN2H	39 15.8	91	UPIH	4 1.6
2	MN1H	107 43.3	92	C	3 1.2
3	MN2H	19 7.7	93	G.G	7 2.8
4	MN2H.R	3 1.2	94	CO1M/SV	201 81.3
5	CO1M/SV	3 1.2	95	G.G.S	99 40.1
6	MN2H	6 2.4	96	UPIH	2 .8
7	UPIH.CO	7 2.8	97	UPIH	1 .4
8	UP2M.CO	12 4.9	98	UPIH	1 .4
9	CO1M/SV	2 .8	99	M.F	1 .4
10	SV.BB	5 2.0	100	CO1M.UP	8 3.2
11	UPIH/SV	15 6.1	101	CO1M/SV	19 7.7
12	UPIH	17 6.9	102	SW1L/SV	9 3.6
13	CO1M/SV	62 25.1	103	UPIH	1 .4
14	G.G	1 .4	104	SW2L/SV	27 10.9
15	G.G	1 .4	105	SV	5 2.0
16	G.G	1 .4	106	UPIH	26 10.5
17	MN1H	5 2.0	107	MN1H	1 .4
18	SW1L/SV	34 13.8	108	G.G	2 .8
19	SV	2 .8	109	MN1H.R	67 27.1
20	UPIH/SV	12 4.9	110	CO1H	1 .4
21	G.F.G.S	13 5.3	111	UPIH	1 .4
22	SW1L/SV	87 35.2	112	UPIH.CO	6 2.4
23	G.G	2 .8	113	SW1L/SV	3 1.2
24	G.G.S	3 1.2	114	SV	2 .8
25	CO1M/SV	17 6.9	115	MN2H	9 3.6
26	AG	2 .8	116	MN1H	12 4.9
27	G.G	19 7.7	117	UPIH	37 15.0
28	CO1M/SV	1 .4	118	G.G.S	2 .8
29	CO1M/SV	2 .8	119	UPIH.CO	22 8.9
30	CO1M/SV	17 6.9	120	G.G.S	1 .4
31	UPIH	5 2.0	121	UPIH	15 6.5
32	UPIH.CO/SV	36 14.6	122	G.G	1 .4
33	U/C	3 1.2	123	B	5 2.0
34	G.G	1 .4	124	MN1H	18 7.3
35	CO1H	7 2.8	125	SW1M/SV	28 11.3
36	G.G	2 .8	126	UPIH	8 3.2
37	UPIH	2 .8	127	B	4 1.6
38	G.G	1 .4	128	UPIH	3 1.2
39	UPIH.CO	4 1.6	129	B	7 2.8
40	U/C	16 6.5	130	G.G	1 .4
41	G.G	6 2.4	131	G.G	1 .4
42	SV	2 .8	132	U	13 5.3
43	C	10 4.0	133	SV	1 .4
44	SW2L.CO/SV	47 19.0	134	G.G	6 2.4
45	SV	2 .8	135	UPIH	2 3.2
46	M.F	1 .4	136	SV	2 .8
47	M.F	2 .8	137	M.F.C	10 4.0
48	CO1M/SV	10 4.0	138	SV	2 .8
49	U	2 .8	139	SV	3 1.2
50	MN1H	6 2.4	140	SV	2 .8
51	UPIH	11 4.5	141	UPIH	3 1.2
52	MN1H	74 29.9	142	MN1H	1 .4
53	UPIH	2 .8	143	UPIH	4 1.6
54	M.F	1 .4	144	MN2H	37 15.0
55	UPIH.CO	5 2.0	145	MN2H.R	31 12.5
56	M.F	5 2.0	146	MN1H	14 5.7
57	CO1M/SV	29 11.7	147	MN2H.R	34 13.8
58	G.G	1 .4	148	SV	6 2.4
59	M.F	3 1.2	149	UPIH	4 1.6
60	G.G.P	414 167.5	150	U	5 2.0
61	SV.S	5 2.0	151	U	1 .4
62	G.G	10 4.0	152	U/C	5 2.0
63	CO1H	2 .8	153	B.C.L	8 3.2
64	SV	3 1.2	154	SW1M/SV	1 .4
65	CO1M/SV	19 7.7	155	SW1M.CO	18 7.3
66	MN1H	104 42.1	156	MN1H	51 20.6
67	SW1L/SV	34 13.8	157	CO1M/SV	2 .8
68	CO1H	4 1.6	158	SW1M/SV	8 3.2
69	UPIH	22 8.9	159	UPIH	2 .8
70	CO1M/SV	15 6.1	160	G.F.G.S	127 51.4
71	SV	2 .8	161	CO1M/SV	12 4.9
72	SW1H	23 9.3	162	SW1M/SV	21 8.5
73	SV	2 .8	163	MN1H	1 .4
74	SV	2 .8	164	UPIH/SV	2 .8
75	M.F	4 1.6	165	SV	5 2.0
76	SV	1 .4	166	M.F	2 .8
77	MN1H	26 10.5	167	SW1M/SV	7 2.8
78	MN2H	7 2.8	168	SV	2 .8
79	MN1H.R	35 14.2	169	B.D	1 .4
80	CO1M/SV	86 34.8	170	MN1H	33 13.4
81	G.G.S	3 1.2	171	MN2H	9 3.6
82	M.F.C	13 5.3	172	C	5 2.0
83	UPIH	4 1.6	173	CO1M/SV	23 9.3
84	MN1H	3 1.2	174	SW1L/SV	16 6.5
85	G.G	1 .4	175	UPIH	25 10.1
86	AG.CO/U	32 12.9			
87	SV	1 .4	NGERKEKLAU		
88	C	2 .8	1	CO1H	15 6.1
89	M.F	6 2.4	2	MN1H	2 .8
90	UPIH	1 .4	3	MN1H	2 .8

PALAU ISLANDS

Index Map

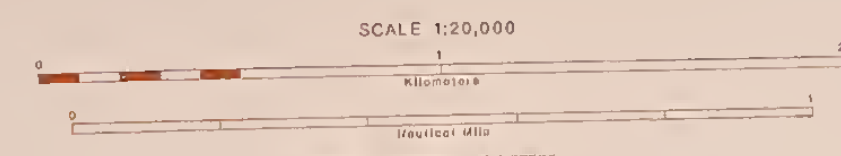


Sheet 3 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D.; Whitesell, Craig D.; Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station. Forest Service, U.S. Department of Agriculture; 1987

AREA			AREA		
ITEM	LABEL	(ACRES) (HECTARES)	ITEM	LABEL	(ACRES) (HECTARES)
1	MNH	1 4	107	G G S	1 4
2	SWIM/SV	75 30.4	108	COIM SW	21 8.5
3	MNH	1 4	109	UPH	21 8.5
4	M F	2 8	110	UPH	21 8.5
5	COIM/SV	8 3.2	111	UPIM/SV	10 4.0
6	COIM/SV	106 42.9	112	G G P	20 8.1
7	B S	1 4	113	M F	7 2.8
8	U	2 8	114	MNH R	7 2.8
9	M F C	23 9.3	115	MNH R	7 2.8
10	AG CO/U	30 12.1	116	MNH R	12 4.9
11	G G P	108 43.7	117	M F	3 1.2
12	UPH	1 4	118	UPIM/SV	8 3.2
13	UPH	1 4	119	UPH	11 4.5
14	MNH	2 8	120	G F G S	70 28.3
15	MNH	5 2.0	121	UPH	297 120.2
16	UPH	2 8	122	G G S	1 4
17	UPH	3 1.2	123	G G S	3 1.2
18	UPH	1 4	124	COIM/SV	3 1.2
19	MNH	3 1.2	125	G G S	2 8
20	UPH	6 2.4	126	UPIM/SV BB	23 9.3
21	UPH	15 6.1	127	M F	2 8
22	G F G S	1 4	128	G G S	3 1.2
23	MNH	38 15.4	129	UPH	2 8
24	UPH	5 2.0	130	UPIM/SV	37 15.0
25	UPH	13 5.3	131	UPH	11 4.5
26	G F G S	13 5.3	132	G G	1 4
27	MNH	35 14.2	133	UPH	1 4
28	M F C	19 7.7	134	G G	2 8
29	COIM/SV	17 6.9	135	SWZL/SV	26 10.5
30	SWZL/SV	18 7.3	136	COH	17 6.9
31	G G	1 4	137	SWZM/SV	8 3.2
32	G G	2 8	138	U	14 5.7
33	UPH	20 8.1	139	M F	65 26.3
34	SWZL/SV	47 19.0	140	SWZL/SV	18 7.3
35	G G S	14 5.7	141	COIM SW	10 4.0
36	MNH	3 1.2	142	COIM/SV	50 20.2
37	G G	2 8	143	MNH	10 4.0
38	MNH	29 11.7	144	MNH	36 14.6
39	MNH	10 4.0	145	SWZL	3 1.2
40	COIM SW	13 5.3	146	COH	6 2.4
41	UPH	4 1.6	147	COH	13 5.3
42	G G P S	194 78.5	148	AG CO	7 2.8
43	UPH	21 8.5	149	C	3 1.2
44	UPH	2 8	150	G C A	3 1.2
45	UPH	2 8	151	UPIM/SV	8 3.2
46	MNH	1 4	152	SWIM/SV	3 1.2
47	UPH	1 4	153	G F G S	20 8.1
48	UPH	34 13.8	154	UPH	10 4.0
49	COIM/SV	3 1.2	155	G F G	11 4.5
50	M F	5 2.0	156	UPH	10 4.0
51	COIM/SV	57 23.1	157	UPH	24 9.7
52	UPH	19 7.7	158	UPIM/SV	11 4.5
53	G F G P	47 19.0	159	UPH	16 6.5
54	UPH	29 11.7	160	UPIL/SV BB	14 5.7
55	UPH	2 8	161	MNH	13 5.3
56	UPH	2 8	162	MNH R	16 6.5
57	SV S	5 2.0	163	MNH	6 2.4
58	MNH	4 1.6	164	MNH	4 1.6
59	MNH	76 30.8	165	MNH	15 6.1
60	G G P	6 2.4	166	MNH	46 18.6
61	G G	12 4.9	167	MNH	1 4
62	UPH	1 2	168	MNH	1 4
63	G G	1 4	169	SWZL/SV	2 8
64	UPH	3 1.2	170	SWZL/SV	2 8
65	C	5 2.0	171	SV	1 4
66	UPH	6 2.4	172	MNH	7 2.8
67	UPH	16 6.5	173	MNH	4 1.6
68	COIM/SV	8 3.2	174	UPH	39 15.8
69	AG CO/U	8 3.2	175	G F G P	15 6.1
70	M F	5 2.0	176	COIM/SV	18 7.3
71	UPIM CO	27 10.9	177	MNH R	5 2.0
72	M F	1 4	178	MNH	173 70.0
73	G G	1 4	179	MNH R	3 1.2
74	COH	13 5.3	180	M F/SV	13 5.3
75	UPH	2 8	181	G G	6 2.4
76	UPH	107 43.3	182	COIM/SV	1 1.2
77	G G S	9 3.6	183	UPIL/SV	22 8.9
78	UPH	6 2.4	184	G F G P	2 8
79	MNH	2 8	185	M F C	1 4
80	MNH	211 85.4	186	U/C	33 13.4
81	MNH R	13 5.3	187	UPIM CO/SV	26 10.5
82	COH	3 1.2	188	COIM/SV	2 8
83	SWIM/SV	90 36.1	189	SV S	10 4.0
84	UPH	1 4	190	MNH	3 1.2
85	SV	1 4	191	UPH	4 1.6
86	G G P	269 108.9	192	U/C	1 4
87	G G S	2 8	193	FF H M	1 4
88	UPH	7 2.8	194	MNH R	25 10.1
89	G G	1 4	195	MNH R	19 7.7
90	COH	13 5.3	196	G G P	5 2.0
91	UPH CO	1 4	197	UPH	1 2.8
92	UPH	8 3.2	198	G S	5 2.0
93	G G	13 5.3	199	UPH	2 8
94	COH	29 11.7	200	U/C	6 2.4
95	SWZL	8 3.2	201	G G P	19 7.7
96	AG CO/U	21 8.5	202	UPIM CO	6 2.4
97	COH	53 21.4	203	SV	2 8
98	UPH	5 2.0	204	UPIL CO	10 4.0
99	UPH	10 4.0	205	SV	1 4
100	G G S	2 8	206	SWH	18 7.3
101	UPH	5 2.0	207	SWIM/SV	10 4.0
102	G G	1 4	208	C	3 1.2
103	COIM/U	12 4.9	209	G G S	6 2.4
104	M F C	93 37.6	210	G G S	6 2.4
105	UPH	22 8.9	211	UPH	19 7.7
106	G G	1 4	212	UPH	112 45.3

Produced by the United States Geological Survey
in cooperation with the Territory of the Pacific Islands
under the 1902 and 1911
Lands and Water Survey Act of 1902
and the 1911
Lands and Water Survey Act of 1911
The map is a reproduction of the original map
and is not a new map.
The map is a reproduction of the original map
and is not a new map.

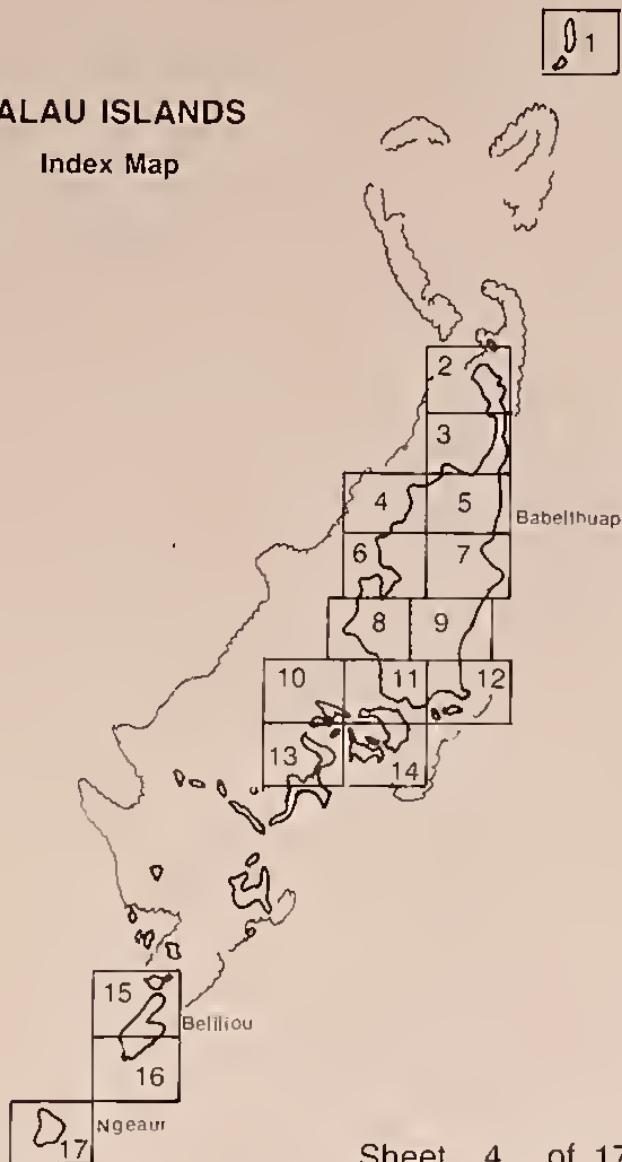


CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
WATERS IS MEAN SEA LEVEL

Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station and Pacific Northwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture
Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomatics Section, 1987.

PALAU ISLANDS

Index Map



Sheet 4 of 17

Cole, Thomas G., Falaruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22 Berkeley, CA Pacific Southwest Forest and Range Experiment Station Forest Service, U.S. Department of Agriculture, 1987

VEGETATION LEGEND
For explanation of vegetation type codes see Table 7

ITEM	LABEL	AREA (ACRES) (HECTARES)	ITEM	LABEL	AREA (ACRES) (HECTARES)
1	MNTH	276 112.5	84	UP2H	7 2.8
2	MNDR	37 15.0	85	UPDR	8 3.2
3	MNDR	13 5.3	86	UPIM SW	1 1.6
4	MNDR	48 19.4	87	SW1H	11 4.5
5	MNTH	15 6.1	88	MNTH	15 6.1
6	UP2H	204 82.6	89	SW1H/SV	4 1.6
7	MNTH	1 4	90	UP1H	33 13.4
8	MNDR	5 2.0	91	G.F.	1 4
9	MNDR	9 3.6	92	G.G.S.	4 1.6
10	CO1H SW	7 2.8	93	G.F.G.S.	4 1.6
11	UP2H	50 20.2	94	G.G.S.	3 1.2
12	G.G.S.	11 4.5	95	G.G.	2 8
13	G.F.G.S.	80 32.4	96	M.F.	1 4
14	UP1H	627 253.7	97	G.G.	1 4
15	SW1H	3 1.2	98	UP2M	9 3.6
16	SW1H/SV	31 12.5	99	G.F.G.S.	20 8.1
17	MNDR	9 3.6	100	G.F.G.S.	1 4
18	G.F.G.S.	13 5.3	101	G.F.G.S.	60 24.3
19	SW1H	3 1.2	102	SV	5 2.0
20	MNTH	112 45.3	103	G.F.G.S.	2 8
21	SW1H	2 8	104	G.F.G.S.	13 5.3
22	SV	3 1.2	105	G.F.S.	5 2.0
23	UP1H	15 6.1	106	G.G.S.	2 8
24	G.G.S.	132 53.4	107	G.F.	1 4
25	SV	8 3.2	108	G.F.G.S.	2 8
26	UP1H	4 1.6	109	G.F.	6 2.4
27	UP2H	66 26.7	110	UP2H	4 1.6
28	UP1H	47 19.0	111	G.F.S.	3 1.2
29	G.G.S.	10 4.0	112	G.F.S.	2 8
30	UP2H	10 4.0	113	UP2H	4 1.6
31	UP1M CO	4 1.6	114	G.F.G.	1 4
32	CO1H	4 1.6	115	G.F.G.	1 4
33	SW1M/SV.BB	3 1.2	116	G.F.G.S.	19 7.7
34	UP1H	5 2.0	117	SW2H	36 14.6
35	UP1H	10 4.0	118	UP1H	4 1.6
36	SW1M/SV	2 8	119	G.F.G.	9 3.6
37	MNDR	16 6.5	120	SW1M/SV	8 3.2
38	SW2H	1 4	121	UP1H	4 1.6
39	M.F.	1 4	122	MNDR	6 2.4
40	G.G.	1 4	123	G.F.	1 4
41	SW1M/SV	5 2.0	124	UP1H	16 6.5
42	UP1H	27 10.9	125	G.S.	1 4
43	CO1H	2 8	126	SW1M/SV	4 1.6
44	UP1H	4 1.6	127	G.G.S.	6 2.4
45	UP1H	1 4	128	MNDR	117 47.3
46	G.F.	1 4	129	SW1M/SV	9 3.6
47	G.F.S.	3 1.2	130	MNDR	10 4.0
48	G.F.G.S.	30 12.1	131	G.F.G.S.	9 3.6
49	G.F.	1 4	132	UP1H	71 28.7
50	G.F.G.S.	2 8	133	UP1H	1 4
51	UP2H	11 4.5	134	UP1H	12 4.9
52	UP1H	1 4	135	SW1H	26 10.5
53	G.G.	1 4	136	SW2H	8 3.2
54	UPDR	2 8	137	MNDR	9 3.6
55	G.F.G.S.	54 21.9	138	MNDR	5 2.0
56	UP2H	7 2.8	139	UP1H	15 6.1
57	UP1H	1 4	140	MNDR	6 2.4
58	UP2H	28 11.3	141	SW1H	100 40.5
59	UP2H	7 2.8	142	M.F.	5 2.0
60	G.F.G.S.	28 11.3	143	SW2H	9 3.6
61	G.F.G.S.	4 1.6	144	SW1H	12 4.9
62	UP2H	3 1.2	145	G.F.G.	31 12.5
63	SW1M CO	55 22.3	146	SW1M/SV	40 16.2
64	UP2H	5 2.0	147	SW1H	3 1.2
65	SW1M/SV	7 2.8	148	M.F.	3 1.2
66	CO1H SW	8 3.2	149	G.G.	6 2.4
67	UP2H	20 8.1	150	UP1H	4 1.6
68	G.G.S.	7 2.8	151	SW1H	6 2.4
69	UP2H	7 2.8	152	MNTH	72 29.1
70	UP2H	33 13.4	153	SW1H	19 7.7
71	UP2M	21 8.5	154	M.F.	9 3.6
72	G.G.S.	56 22.7	155	G.F.G.	118 47.8
73	UP1H	100 40.5	156	G.G.	10 4.0
74	UP2H	4 1.6	157	SW1M/SV	34 13.8
75	G.G.S.	6 2.4	158	M.F.	4 1.6
76	G.G.S.	4 1.6	159	SW1H	17 6.9
77	UP2H	3 1.2	160	M.F.	11 4.5
78	UP2M	47 19.0	161	SW1H	4 1.6
79	UPDR	12 4.9	162	G.G.S.	2 8
80	G.F.S.	3 1.2	163	SW1H	23 9.3
81	UP2H	6 2.4	164	G.G.S.	9 3.6
82	G.F.G.S.	12 4.9	165	M.F.	9 3.6
83	UP1H	4 1.6	166	SW1H	1 4
84	G.G.	1 4	167	G.G.	7 2.8
85	UPDR	80 32.4	168	UPDR	1 4
86	G.F.S.	1 4	169	UPDR	2 8
87	UP1H	940 380.4	170	UPDR	1 4
88	UPDR	12 4.9	171	UP1H	1 4
89	UPDR	3 1.2	172	UPDR	1 4
90	UP2H	8 3.2	173	G.F.G.S.	6 2.4
91	SV	3 1.2	174	M.F.	1 4
92	UPDR	8 3.2	175	UPDR	1 4
93	G.F.G.P.	40 16.2			



Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station and Pacific Northwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture
Cartography by Alan H. Ambach, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomatics Section, 1987.

PALAU ISLANDS

Index Map



Sheet 5 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig O., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 1987.

For explanation of vegetation type codes see Table 7.

ITEM	LABEL	AREA (XONES) (PSECTS)	ITEM	LABEL	AREA (XONES) (PSECTS)	ITEM	LABEL	AREA (XONES) (PSECTS)
1	UPNH	2	181	G.G.S	3 12	360	MF	
2	UPNH	108	182	UPNH	12 49	361	UPNH	10 40
3	UPNH	23 93	183	G.F.G.S	29 117	362	SWM/MSV	11 45
4	UPNH	6 12	184	G.F.S	2 8	363	G.F.S	21 8
5	G.G.S	25 101	185	UPNH	2 28	364	SWILCO/VS	69 279
6	UPNH	44 28	186	UPNH	2 8	365	C	2
7	UC	4 4	187	G.F.S	1 4	366	UPNH	2 8
8	UPNH	2 8	188	UPNH	5 20	367	UPNH	6 24
9	UPNH	2 8	189	UPNH	2 8	368	UPNH	5 20
10	PFH/L	2 8	190	G.G.S	2 8	369	SWM/MSV	5 20
11	PFH/L	1 4	191	UPNH	4 16	370	C	2
12	UPNH	2 8	192	G.F.S	1 4	371	G.G	128 720
13	M.F.C	21 85	193	UPNH	0 32	372	UPNH	4 16
14	MF	4 4	194	UPNH	17 65	373	UPNH	1 36
15	UC	116 469	195	UPNH	10 40	374	UPNH	1 36
16	SV	8 32	196	SWM/MSV	6 24	375	UPNH	7 28
17	COH/SHW	17 65	197	UPNH	10 40	376	G.G.S	1 20
18	G.F.G.S	63 255	198	SWM/MSV	7 28	377	G.F.G.S	14 57
19	D.F.G.P	160 672	199	G.F.G.S	11 45	378	UPNH	3 12
20	M.F.P	2 8	200	UPNH	12 49	379	SWM/MSV	5 20
21	UPNH	7755 31383	201	C	2 8	380	SWH	155 627
22	C	2 8	202	C	6 24	381	C	2 8
23	UPH/VS	2 8	203	C	1 4	382	UPNH	2 8
24	UPNH	14 57	204	UPH/CO	118 478	383	G.F.G.S	1 4
25	UPNH	46 186	205	MF	205	384	UPNH	17 69
26	SV	9 36	206	COM/MSV	12 49	385	UPNH	3 12
27	SWM/MSV	85 344	207	C	3 12	386	SWM/MSV	5 20
28	MNH/H	4 4	208	SWILCO/VS	26 105	387	UPNH	2 8
29	G.F.G.S	2 8	209	MNH/H	220 890	388	UPNH	6 24
30	MNH/H	6 24	210	MNH/H	2 8	389	UPNH	2 8
31	MNH/H	28 113	211	G.G	22 89	390	UPNH	7 28
32	UPNH	4 16	212	UPNH	1 12	391	UPNH	5 20
33	MNH/H	3 12	213	G.G.S	3 16	392	G.F.G.S	4 16
34	UPNH	3 12	214	G.G	7 28	393	UPNH	4 16
35	UPNH	3 12	215	UPNH	2 8	394	UPNH	2 8
36	SWH	7 28	216	G.F.G.S	3 12	395	GF	2 8
37	UPH/VS/BB	42 170	217	BC/L	2 8	396	UPNH	12 49
38	UPNH	6 24	218	UPNH	5 20	397	UPNH	6 24
39	G.F.G.S	6 24	219	SWM/MSV	5 20	398	G.F.G.S	3 12
40	UPNH	20 8	220	M.F.P	7 28	399	UPNH	5 20
41	UPNH	2 8	221	G.F.G.S	179 724	400	UPNH	18 73
42	G.G	13 53	222	MF	11 4	401	GF	1 4
43	UPNH	43 16	223	SWM/CO	11 4	402	G.F.S	1 4
44	UPNH	16 65	224	MF	3 12	403	G.F.G.S	5 20
45	UPNH	4 16	225	UPNH	2 8	404	UPNH	29 117
46	UPNH	78 316	226	COH/L	12 49	405	UPNH	5 20
47	UPNH	5 20	227	COH/L	4 16	406	UPNH	4 16
48	UPNH	5 20	228	UPNH	3 12	407	UPNH	2 8
49	G.G	2 8	229	UPNH	12 49	408	G.F.G.S	32 129
50	G.F.G.	1 4	230	G.F.G.S	3 12	409	UPNH	5 20
51	MF	6 24	231	G.F.S	1 4	410	UPNH	6 24
52	UPNH	36 146	232	G.F.G.S	132 534	411	UPNH	24 97
53	UPNH	7 28	233	UPNH	2 8	412	UPNH	32 129
54	SWM/MSV	35 142	234	UPNH	10 40	413	GF	1 4
55	G.F.G.S	3 12	235	G.G.S	10 40	414	UPNH	72 291
56	G.F.G.S	3 12	236	UPNH	10 40	415	G.G	1 4
57	COM/MSV	7 28	237	UPNH	5 20	416	UPNH	6 24
58	UPNH	82 332	238	UPNH	3 12	417	UPNH	6 24
59	COH/L	10 40	239	UPNH	15 61	418	M.F.P	4 16
60	M.F	4 4	240	UPNH	2 8	419	G.G	2 8
61	UPNH	12 49	241	UPNH	1 12	420	UPNH	17 69
62	MNH/H	175 708	242	UPNH	3 12	421	G.G.S	6 24
63	COM/MSV	19 77	243	UPNH	3 12	422	G.G.S	16 64
64	COM/MSV	19 77	244	UPNH	6 24	423	UPNH	10 40
65	COH/L	5 20	245	UPNH	6 24	424	UPNH	20 121
66	UPNH	12 49	246	UPNH	6 24	425	UPNH	13 53
67	SWM/MSV	17 69	247	UPNH	12 49	426	UPNH	17 69
68	G.F.G.S	8 32	248	G.F.G.S	19 77	427	G.F.G.S	7 28
69	G.F.G.S	1 40	249	UPNH	2 8	428	UPNH	7 28
70	GC	1 4	250	UPNH	5 20	429	UPNH	7 28
71	UPNH	2 8	251	M.F.S	1 4	430	UPNH	20 81
72	SWM/MSV	19 77	252	UPNH	5 20	431	UPNH	20 81
73	UPNH	47 199	253	G.F.S	6 24	432	G.G.S	2 8
74	G.F.G.S	3 12	254	UPNH	6 24	433	G.F.G.S	1 4
75	G.F.G.S	4 16	255	G.F.S	4 18	434	UPNH	56 221
76	UPNH	16 65	256	UPNH	255 1027	435	UPNH	56 221
77	G.F.G.S	11 45	257	G.F.G.S	255 1027	436	UPNH	56 221
78	O.F.G.S	1 4	258	G.F.G.S	1 4	437	GF	1 4
79	UPNH	2 8	259	MF	1 4	438	G.F.S	8 32
80	UPNH	10 40	260	GF	1 4	439	G.F.G.S	5 20
81	COH/SHW	44 165	261	UPNH	2 8	440	UPNH	5 20
82	COH/SHW	44 165	262	UPNH	2 8	441	UPNH	5 20
83	UPNH	49 198	263	BD	8 32	442	G.F.G.S	16 65
84	G.G.S	3 12	264	UPNH	2 8	443	G.F.S	3 12
85	G.F.G.S	8 32	265	G.F.S	1 4	444	G.F.S	3 12
86	G.F.G.S	3 12	266	UPNH	20 81	445	G.F.S	1 4
87	G.F.G.S	3 12	267	UPNH	20 81	446	UPNH	4 16
88	UPNH	5 20	268	UPNH	24 97	447	G.F.S	4 16
89	UPNH	5 20	269	UPNH	3 12	448	G.F.G.S	7 28
90	UPNH	8 32	270	UPNH	12 49	449	UPNH	11 45
91	UPNH	2 8	271	G.F.S	2 8	450	UPNH	11 45
92	UPNH	2 8	272	GF	1 4	451	UPNH	11 45
93	UPNH	2 8	273	GF	1 4	452	GF	3 12
94	UPNH	2 8	274	GF	1 4	453	GF	1 4
95	UPNH	6 24	275	GF	1 4	454	GF	1 4
96	UPNH	23 93	276	GF	1 4	455	GF	1 4
97	UPNH	2 8	277	UPNH	1 4	456	GF	1 4
98	UPNH	60 243	278	UPNH	6 24	457	GF	1 4
99	UPNH	11 45	279	G.F.G.S	11 45	458	UPNH	10 40
100	MF	6 24	280	MF	6 24	459	UPNH	10 40
101	G.G	1 4	281	G.G.S	1 4	460	UPNH	2 8
102	UPNH	2 8	282	G.F.G.S	1 4	461	UPNH	2 8
103	MF	5 20	283	G.F.S	20 81	462	UPNH	12 49
104	UPNH	24 97	284	UPNH	1 4	463	G.F.S	9 36
105	G.G.S	30 120	285	UPNH	5 20	464	UPNH	9 36
106	BD	44 178	286	GF	5 20	465	GF	3 12
107	G.G.S	15 61	287	UPNH	10 40	466	UPNH	5 20
108	BD	29 117	288	UPNH	10 40	467	UPNH	16 64
109	UPNH	52 210	289	GF	2 8	468	G.F.G.S	26 105
110	UPNH	52 210	290	GF	2 8	469	UPNH	26 105
111	SV	16 65	291	G.F.S	25 101	470	UPNH	11 45
112	MF	41 168	292	G.G	82 332	471	G.F.G.S	2 8
113	UPH/CO	28 113	293	G.F.G	82 332	472	G.F.G.S	4 16
114	MF	1 4	294	UPNH	1 28	473	UPNH	12 49
115	UPNH	2 8	295	UPNH	1 28	474	G.F.S	8 32
116	G.F.G.S	45 182	296	UPNH	23 93	475	UPNH	69 279
117	UPH/CO	12 49	297	UPNH	4 16	476	UPNH	2 8
118	UPNH	2 8	298	UPNH	4 16	477	G.G	2 8
119	G.G.S	1 4	299	G.F.G.S	8 32	478	UPNH	17 69
120	UPH/CO	10 40	300	UPNH	17 69	479	G.G	2 8
121	G.F.G.S	1 4	301	G.F.G.S	17 69	480	UPNH	17 69
122	SWM/CO	11 45	302	BC/L	4 16	481	G.F.G	1 4
123	UPNH	21 8	303	UPNH	4 16	482	G.G.S	1 4
124	MNH/H	4 4	304	GF	1 4	483	G.G	1 4
125	SWM/CO	23 93	305	UPNH	2 8	484	UPNH	1 28
126	MF	1 4	306	G.F.G.S	2 8	485	UPNH	1 28
127	UPNH	1 4	307	UPNH	6 24	486	G.F.S	6 24
128	G.G.S	3 12	308	UPNH	6 24	487	G.F.S	2 8
129	G.G.S	9 36	309	UPNH	2 8	488	UPNH	1 4
130	UPNH	2 8	310	G.G	1 4	489	GF	1 4
131	UPNH	2 8	311	UPNH	1 4	490	UPNH	1 4
132	G.F.G.S	28 113	312	G.G.S	1 4	491	GF	4 16
133	G.F.G.S	30 121	313	UPNH	10 40	492	UPNH	16 64
134	G.F.G.S	5 20	314	UPNH	1 16	493	SWM/MSV	14 57
135	UPNH	2 8	315	UPNH	6 24	494	SWM/MSV	14 57
136	UPNH	2 8	316	UPNH	6 24	495	G.F.G.S	19 80
137	UPNH	2 8	317	UPNH	7 20	496	G.F.G.S	51 206
138	UPNH	10 40	318	G.G.S	4 16	497	C	2 8
139	UPNH	10 40	319	G.G.S	4 16	498	G.F.S	9 36
140	UPNH	2 8	320	UPNH	24 97	499	G.G.S	9 36
141	G.F.G.S	4 16	321	G.G.S	3 12	500	MNH/H	50 202
142	G.F.G.S	5 20	322	UPNH	18 73	501	MNH/H	121 530
143	G.F.G.S	122 478	323	UPNH	7 28	502	MF	12 49
144	G.F.G.S	2 8	324	UPNH	7 28	503	UPNH	20 113
145	G.F.G.S	2 8	325	UPNH	3 12	504	G.G	4 16
146	G.F.G.S	2 8	326	G.F.G.S	12 49	505	MF	2 8
147	G.F.G.S	2 8	327	G.F.S	5 20	506	COH/L	146 616
148	G.F.S	1 4	328	G	5 20	507	UPNH	3 12
149	UPNH	5 20	329	G	5 20	508	UPNH	3 12
150	UPNH	5 20	330	UPNH	3 12	509	UPNH	67 271
151	UPNH	5 20	331	G.F.G.S	26 105	510	UPNH	7 28
152	GF	2 8	332	G.F.G.S	21 85	511	UPNH	7 28
153	GF	2 8	333	UPNH	21 85	512	MF	3 12
154	UPNH	2 8	334	G.F.G.S	11 45	513	UPNH	3 12
155	GF	2 8	335	UPNH	2 8	514	UPNH	3 12
156	UPNH	2 8	336	G.F.G.S	2 8	515	UPNH	3 12
157	UPNH	44 170	337	G.F.G.S	2 8	516	UPNH	3 12
158	G.F.G.S	14 57	338	G.F.G.S	2 8	517	UPNH	3 12
159	UPNH	7 28	339	UPNH	9 36	518	UPNH	3 12
160	UPNH	182 672	340	UPNH	9 36	519	UPNH	3 12
161	UPNH	182 672	341	UPNH	9 36	520	UPNH	3 12
162	UPNH	22						



Produced by the United States Geological Survey,
in cooperation with Trust Territory, of the Pacific Islands.
Conducted by USGS and TTI.
Compiled by photomicrographs, microfilm from aerial photomicrographs
taken 1949 - 1954 (revised 1975)
Limited Serial Chart, 1980 Map Sheet 1981
Production and editing of USGS and TTI
National Aeronautics Administration
Majority of the data have been collected in the past

SCALE 1:20,000

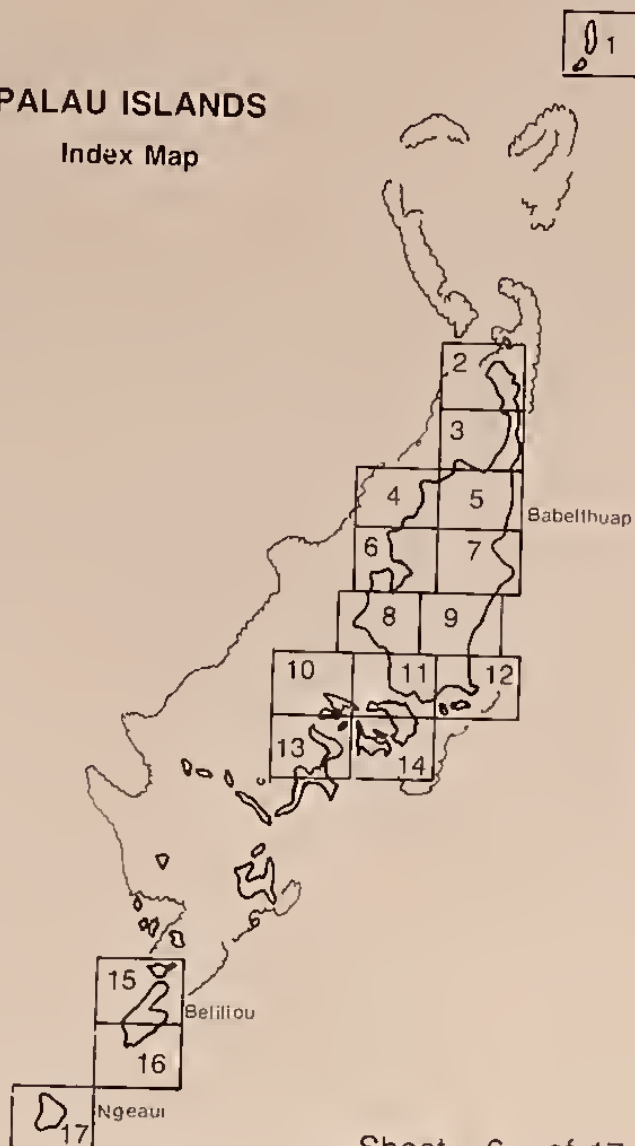
CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL

LINE SHOWN REPRESENTS THE APPROXIMATE OF MEAN HIGH
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 METER

Vegetation map compiled by Pacific Southwest Forest and Range Experiment Station and Pacific Northwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. Cartography by Alan H. Ambacher, USOA - Forest Service, Pacific Southwest Region, Engineering Geomtronics Section; 1987.

PALAU ISLANDS

Index Map



Sheet 6 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 1987.

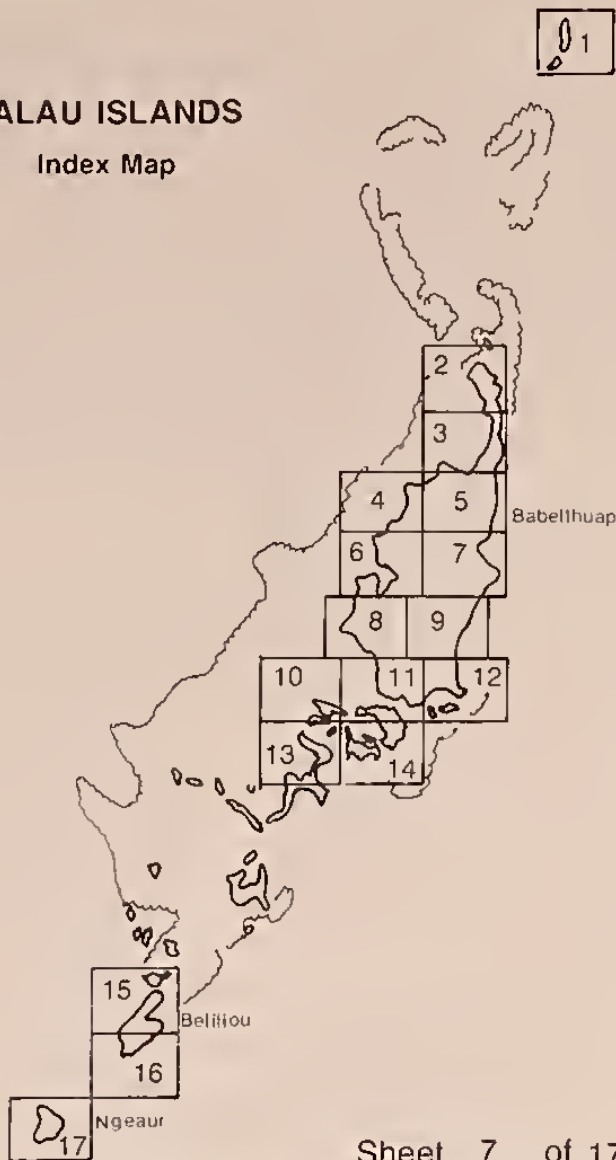


VEGETATION LEGEND
For explanation of vegetation type codes see Table 7.

ITEM	LABEL	AREA HECTARES (ACRES)	ITEM	LABEL	AREA HECTARES (ACRES)	ITEM	LABEL	AREA HECTARES (ACRES)	ITEM	LABEL	AREA HECTARES (ACRES)
1	MNH	153.8	158	G.F.S.	1.4	314	M.F.C.	3.12	470	UPH	11.45
2	SWH	6.24	159	G.G.	3.12	315	G.G.	53.214	471	M.F.	4.16
3	G.G.S.	15.61	160	UPH	1.4	316	G.G.	2.8	472	SV	8.16
4	G.G.	15.61	161	B.C.L.	1.4	317	UPH	2.8	473	G.G.S.	4.16
5	MNH	11.45	162	G.F.S.	16.12	318	G.F.S.	16.12	474	SV	8.16
6	SWH	3.12	163	B.C.L.	3.12	319	G.F.S.	2.8	475	UPH	11.45
7	G.G.P.	10.4	164	G.F.S.	3.12	320	G.F.S.	4.16	476	UPH	11.45
8	SWH	5.20	165	G.F.S.	30.121	321	G.F.	1.4	477	UPH	11.45
9	UPH	12.49	166	UPH	5.20	322	G.F.	3.12	478	UPH	11.45
10	M.F.	12.49	167	G.F.	1.4	323	G.F.	1.4	479	G.G.	2.8
11	M.F.	2.8	168	G.S.	2.8	324	G.P.P.	12.49	480	G.G.S.	2.8
12	SWH	2.8	169	UPH	5.20	325	UPH	12.49	481	G.G.	3.12
13	G.G.S.	3.12	170	G.S.	2.8	326	G.G.	39.158	482	G.G.	2.8
14	SWH	15.61	171	UPH	4.16	327	SWH	13.53	483	G.G.	2.8
15	G.G.	15.61	172	G.G.	4.16	328	M.F.C.	1.4	484	G.G.	2.8
16	UPH	2.8	173	UPH	6.24	329	G.G.	3.12	485	G.G.	2.8
17	UPH	2.8	174	G.G.	2.8	330	G.G.	2.8	486	UPH	11.45
18	SWH	3.12	175	G.G.	2.8	331	G.G.S.	2.8	487	G.F.S.	6.24
19	SWH	15.61	176	UPH	36.12	332	UPH	11.45	488	UPH	11.45
20	COH	16.12	177	UPH	3.12	333	UPH	4.16	489	G.F.S.	610.249
21	SWH	6.24	178	UPH	1.4	334	UPH	4.16	490	G.F.S.	1.4
22	G.P.P.	6.24	179	UPH	1.4	335	UPH	5.20	491	G.G.S.	4.16
23	UPH	4.16	180	G.G.	40.162	336	G.F.S.	7.28	492	UPH	11.45
24	SWH	3.12	181	UPH	19.77	337	UPH	7.28	493	G.G.S.	1.4
25	SWH	3.12	182	UPH	2.8	338	UPH	7.28	494	UPH	10.4
26	SWH	2.8	183	UPH	2.8	339	UPH	2.8	495	G.G.	1.4
27	G.G.	14.57	184	UPH	1.4	340	G.G.S.	6.24	496	G.G.	1.4
28	SWH	3.12	185	UPH	16.12	341	G.G.	7.28	497	G.F.S.	39.158
29	M.F.	4.16	186	UPH	128.465	342	G.G.	1.4	498	UPH	11.45
30	SWH	18.73	187	G.F.S.	2.8	343	G.F.S.	9.36	499	G.C.A.G.	3.12
31	G.F.F.	36.12	188	M.F.	1.4	344	UPH	11.45	500	UPH	11.45
32	UPH	17.69	189	G.G.S.	2.8	345	UPH	17.69	501	UPH	11.45
33	M.F.	1.4	190	G.G.S.	1.4	346	UPH	2.8	502	UPH	11.45
34	G.G.	1.4	191	G.G.S.	1.4	347	UPH	2.8	503	UPH	11.45
35	SWH	19.77	192	UPH	7.28	348	UPH	22.89	504	G.F.S.	1.4
36	G.G.S.	16.12	193	G.G.S.	2.8	349	UPH	2.8	505	UPH	8.16
37	M.F.	3.12	194	UPH	4.16	350	UPH	10.4	506	G.F.	1.4
38	M.F.	3.12	195	UPH	3.12	351	UPH	3.12	507	G.F.	1.4
39	SWH	1.4	196	G.F.S.	1.4	352	UPH	2.8	508	UPH	6.24
40	SWH	4.16	197	G.F.	1.4	353	UPH	1.4	509	G.F.	2.8
41	SWH	3.12	198	G.F.S.	4.16	354	G.G.	1.4	510	UPH	6.24
42	SWH	3.12	199	G.G.	1.4	355	UPH	25.101	511	UPH	6.24
43	G.G.	45.182	200	G.G.	1.4	356	UPH	8.16	512	UPH	10.4
44	G.G.	45.182	201	G.G.	1.4	357	UPH	8.16	513	UPH	6.24
45	G.G.	45.182	202	G.G.	1.4	358	UPH	4.16	514	G.G.S.	8.16
46	SWH	12.49	203	UPH	4.16	359	G.G.S.	4.16	515	G.G.S.	8.16
47	MNH	13.53	204	G.G.	6.24	360	UPH	1.4	516	G.G.	1.4
48	G.P.P.	171.692	205	G.F.	1.4	361	UPH	6.24	517	G.G.	1.4
49	SWH	9.36	206	G.F.	1.4	362	UPH	1.4	518	G.G.	1.4
50	MNH	116.469	207	UPH	3.12	363	UPH	1.4	519	G.G.	1.4
51	R.H.	3.12	208	UPH	7.28	364	UPH	1.4	520	G.G.	1.4
52	G.G.	2.8	209	G.F.	1.4	365	UPH	1.4	521	G.G.	23.93
53	G.G.	2.8	210	UPH	172.696	366	UPH	2.8	522	UPH	22.89
54	MNH	23.93	211	G.G.	1.4	367	UPH	1.4	523	G.G.S.	1.4
55	SWH	20.93	212	G.G.	1.4	368	UPH	1.4	524	G.G.	1.4
56	UPH	40.162	213	G.F.	1.4	369	UPH	1.4	525	G.G.	1.4
57	UPH	20.93	214	G.G.	1.4	370	UPH	1.4	526	UPH	1.4
58	UPH	17.69	215	M.F.	1.4	371	UPH	6.24	527	G.F.S.	4.16
59	UPH	10.4	216	UPH	11.45	372	G.G.	1.4	528	G.G.	4.16
60	UPH	10.4	217	M.F.	1.4	373	G.G.	1.4	529	G.G.	23.93
61	SWH	10.4	218	G.G.	1.4	374	G.G.	2.8	530	M.F.	1.4
62	SWH	12.49	219	G.G.	1.4	375	G.G.	1.4	531	UPH	1.4
63	G.P.P.	6.24	220	G.G.	9.36	376	G.G.	2.8	532	G.G.	1.4
64	G.P.P.	6.24	221	M.F.	11.45	377	G.G.	1.4	533	UPH	1.4
65	UPH	4.16	222	M.F.	10.4	378	UPH	1.4	534	UPH	6.24
66	SWH	6.24	223	UPH	2.8	379	UPH	1.4	535	G.G.S.	5.20
67	UPH	43.20	224	UPH	7.28	380	UPH	7.28	536	UPH	1.4
68	UPH	1.4	225	UPH	1.4	381	UPH	4.16	537	UPH	5.20
69	C	1.4	226	UPH	1.4	382	UPH	1.4	538	UPH	134.542
70	C	1.4	227	UPH	24.97	383	UPH	6.24	539	UPH	1.4
71	C	1.4	228	UPH	1.4	384	UPH	6.24	540	UPH	1.4
72	COH	85.341	229	M.F.	2.8	385	G.G.	1.4	541	UPH	102.413
73	B.C.L.	5.20	230	G.G.S.	13.53	386	G.G.	1.4	542	UPH	41.166
74	G.F.S.	1.4	231	M.F.	1.4	387	UPH	1.4	543	UPH	1.4
75	M.F.	1.4	232	UPH	3.12	388	UPH	20.113	544	UPH	2.8
76	G.P.P.	1.4	233	UPH	3.12	389	UPH	2.8	545	UPH	2.8
77	G.P.P.	1.4	234	UPH	15.61	390	UPH	27.109	546	UPH	34.138
78	UPH	22.89	235	UPH	11.45	391	UPH	3.12	547	UPH	163.660
79	G.P.P.	10.4	236	UPH	11.45	392	UPH	4.16	548	UPH	27.109
80	UPH	9.36	237	G.G.	4.16	393	UPH	1.4	549	UPH	42.170
81	G.P.P.	9.36	238	M.F.	1.4	394	UPH	1.4	550	UPH	1.4
82	UPH	15.61	239	M.F.	1.4	395	UPH	2.8	551	UPH	186.789
83	G.G.	2.8	240	UPH	1.4	396	UPH	2.8	552	UPH	6.24
84	UPH	2.8	241	UPH	1.4	397	UPH	18.73	553	UPH	1.4
85	M.F.	3.12	242	G.G.S.	310.125	398	UPH	6.24	554	G.G.	1.4
86	UPH	14.57	243	UPH	7.28	399	UPH	23.93	555	UPH	1.4
87	UPH	7.28	244	UPH	7.28	400	UPH	4.16	556	UPH	16.12
88	UPH	16.12	245	UPH	14.57	401	UPH	2.8	557	UPH	1.4
89	UPH	16.12	246	UPH	14.57	402	UPH	2.8	558	UPH	1.4
90	UPH	5.20	247	UPH	14.57	403	UPH	2.8	559	UPH	1.4
91	M.F.S.	1.4	248	UPH	14.57	404	UPH	2.8	560	UPH	1.4
92	SWH	181.732	249	G.F.S.	1.4	405	UPH	2.8	561	UPH	1.4
93	G.G.	1.4	250	G.F.S.	1.4	406	UPH	2.8	562	UPH	1.4
94	G.G.	1.4	251	UPH	9.36	407	UPH	2.8	563	UPH	1.4
95	UPH	26.195	252	UPH	9.36	408	UPH	2.8	564	UPH	1.4
96	UPH	9.36	253	UPH	15.61	409	UPH	2.8	565	UPH	1.4
97	G.G.S.	5.20	254	UPH	15.61	410	UPH	2.8	566	UPH	1.4
98	UPH	10.4	255	UPH	6.24	411	UPH	2.8	567	UPH	1.4
99	UPH	10.4	256	UPH	6.24	412	UPH	2.8	568	UPH	1.4
100	UPH	25.101	257	G.G.S.	8.16	413	UPH	2.8	569	UPH	1.4
101	G.G.	3.12	258	G.G.S.	8.16	414	UPH	2.8	570	UPH	1.4
102	UPH	3.12	259	G.G.S.	8.16	415	UPH	2.8	571	UPH	1.4
103	G.G.	3.12	260	G.G.S.	8.16	416	UPH	2.8	572	UPH	1.4
104	UPH	2.8	261	G.G.S.	8.16	417	UPH	2.8	573	UPH	1.4
105	G.G.	2.8	262	G.G.S.	8.16	418	UPH	2.8	574	UPH	1.4
106	UPH	9.36	263	G.G.S.	8.16	419	UPH	2.8	575	UPH	1.4
107	UPH	9.36	264	G.G.S.	8.16	420	UPH	2.8	576	UPH	1.4
108	UPH	9.36	265	G.G.S.	8.16	421	UPH	2.8	577	UPH	1.4
109	UPH	9.36	266	G.G.S.	8.16	422	UPH	2.8	578	UPH	1.4
110	UPH	9.36	267	G.G.S.	8.16	423	UPH	2.8	579	UPH	1.4
111	UPH	9.36	268	G.G.S.	8.16	424	UPH	2.8	580	UPH	1.4
112	G.F.S.	1.4	269	G.G.S.	8.16	425	UPH	2.8	581	UPH	1.4
113	B.C.L.	1.4	270	G.G.S.	8.16	426	UPH	2.8	582	UPH	1.4
114	G.G.S.	57.231	271	G.G.S.	8.16	427	UPH	2.8	583	UPH	1.4
115	UPH	11.45	272	G.G.S.	8.16	428	UPH	2.8	584	UPH	1.4
116	C	16.65	273	G.G.S.	8.16	429	UPH	2.8	585	UPH	1.4
117	G.G.	7.28	274	G.G.S.	8.16	430	UPH	2.8	586	UPH	1.4
118	SWH	4.16	275	G.G.S.	8.16	431	UPH	2.8	587	UPH	1.4
119	G.G.	7.28	276	G.G.S.	8.16	432	UPH	2.8	588	UPH	1.4
120	G.G.S.	7.28	277	G.G.S.	8.16	433	UPH	2.8	589	UPH	1.4
121	G.F.S.	5.20	278	G.G.S.	8.16	434	UPH	2.8	590	UPH	1.4
122	UPH	4.16	279	G.G.S.	8.16	435	UPH	2.8	591	UPH	1.4
123	G.G.S.	4.16	280	G.G.S.	8.16	436	UPH	2.8	592	UPH	1.4
124	B.C.L.	10.4	281	G.G.S.	8.16	4					

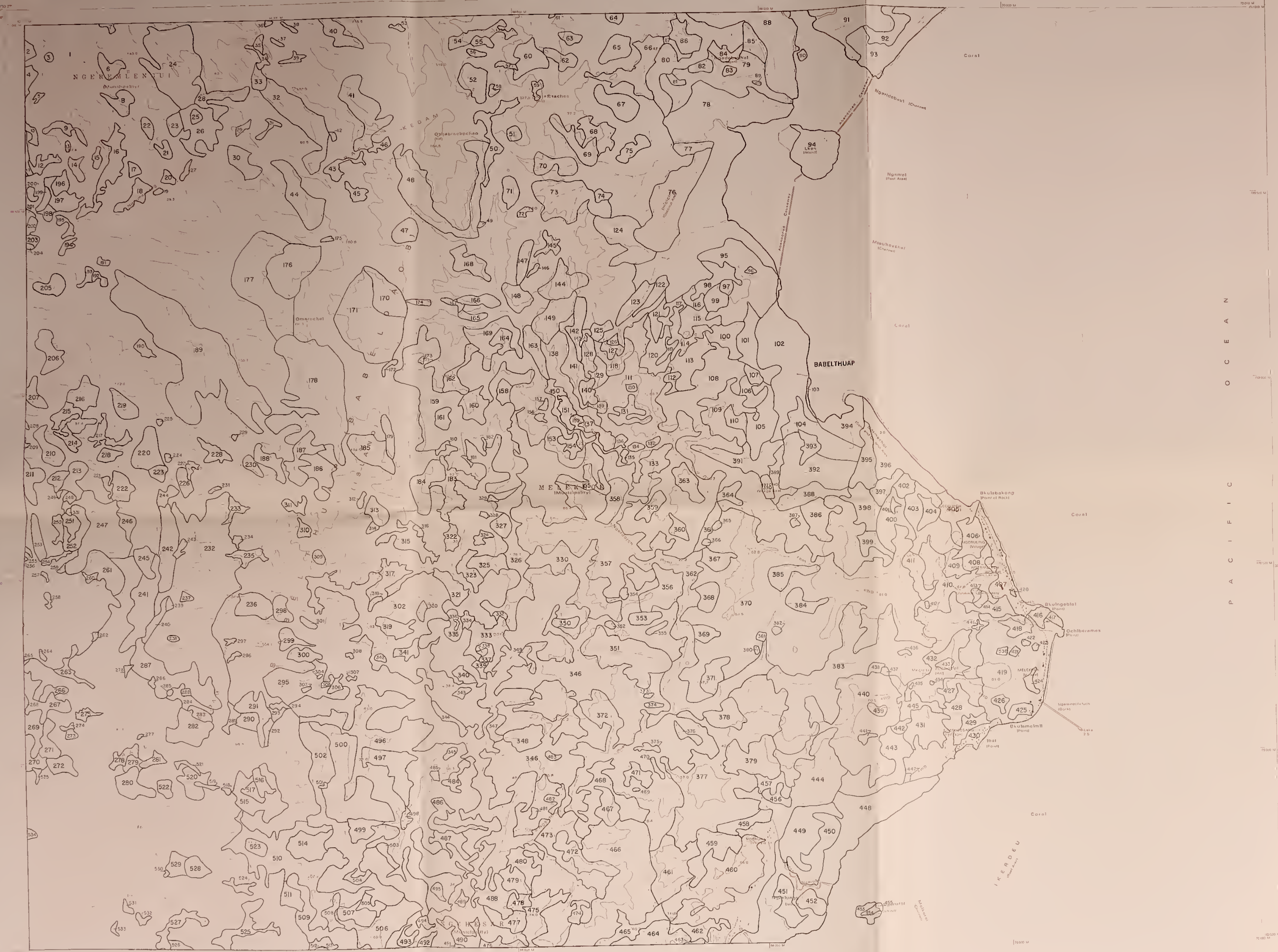
PALAU ISLANDS

Index Map

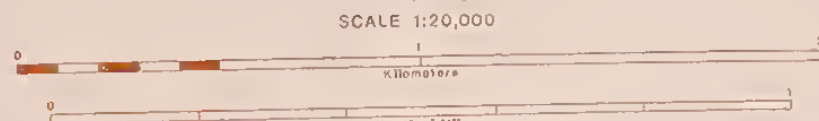


Sheet 7 of 17

Cole, Thomas G., Fatanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 1987.



Produced by the United States Geological Survey
in cooperation with the Palau Government
Copyright by the U.S. Geological Survey
1987



CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF PLAIN BEACH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 METER

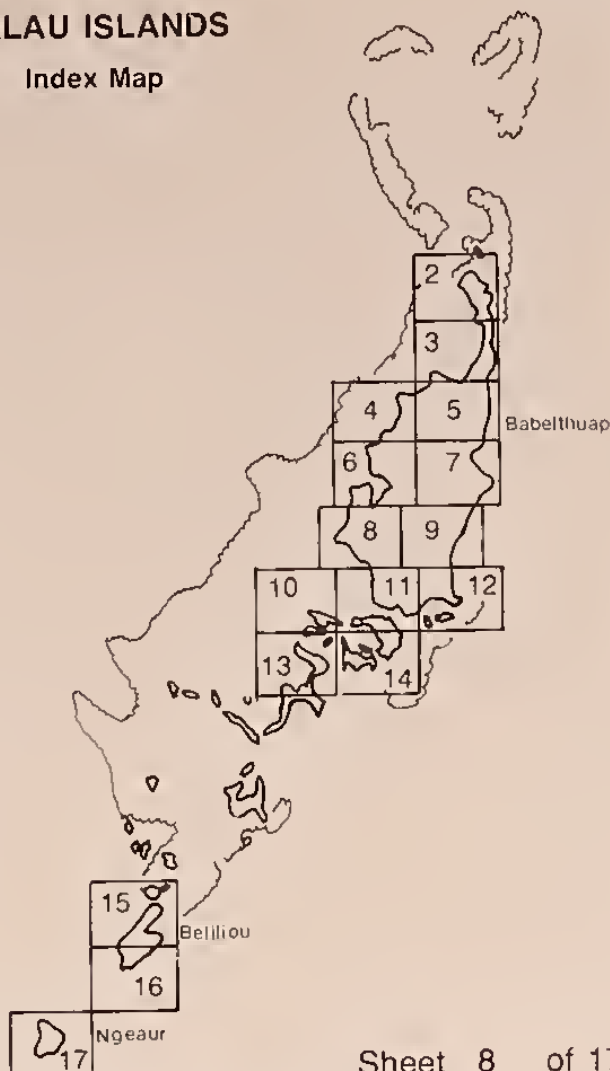
VEGETATION LEGEND

For explanation of vegetation type codes see Table 7.

ITEM	LABEL	AREA	ITEM	LABEL	AREA	ITEM	LABEL	AREA	ITEM	LABEL	AREA				
1	UPH	3832	137	W	8	273	UPH	2	8	410	UPH	44	178		
2	GS	1	138	UPH	24	274	GGS	1	4	411	UPH	12	49		
3	UPH	1	139	BCL	3	12	275	GGS	1	4	412	UPH	1	4	
4	GS	4	140	UPH	6	24	276	GF	1	4	413	COH/UP	2	8	
5	GF	1	141	GGS	15	60	277	GGS	1	4	414	UPH	10	40	
6	UPH	1	142	UPH	11	45	278	G F G S	6	24	415	C	10	40	
7	GGS	2	8	143	GGS	2	8	279	UPH	4	16	416	COH/MSV	5	20
8	UPH	8	32	144	UPH	18	72	280	UPH	12	48	417	C	10	40
9	GGS	5	20	145	G F G S	5	20	281	GGS	1	4	418	MFC	6	24
10	GGS	3	12	146	GGS	2	8	282	GGS	18	72	419	UPH	91	368
11	UPH	2	8	147	UPH	8	32	283	UPH	7	28	420	UPH	2	8
12	GGS	5	20	148	UPH	10	40	284	UPH	7	28	421	UPH	2	8
13	GGS	1	4	149	UPH	20	80	285	GF	1	4	422	C	1	4
14	GGS	1	16	150	MFC	7	28	286	GGS	1	4	423	C	1	4
15	GGS	3	12	151	W	4	16	287	UPH	35	140	424	UPH	5	20
16	GGS	10	40	152	MFC	4	16	288	GF	1	4	425	UPH	1	4
17	UPH	3	12	153	UPH	14	57	289	UPH	1	16	426	C	1	4
18	GGS	8	32	154	GGS	5	20	290	UPH	5	20	427	UPH	10	40
19	GGS	1	4	155	UPH	11	45	291	UPH	12	49	428	COH/MSV	8	32
20	GGS	3	12	156	GGS	2	8	292	UPH	3	12	429	UPH	9	36
21	UPH	4	16	157	GGS	2	8	293	UPH	2	8	430	AG COU	9	36
22	UPH	3	12	158	G F G S	5	20	294	G F G S	2	8	431	GGS	22	88
23	UPH	5	20	159	UPH	126	510	295	UPH	10	40	432	UPH	30	120
24	UPH	56	227	160	UPH	11	45	296	GF	1	4	433	UPH/MSV	3	12
25	UPH	2	8	161	UPH	5	20	297	UPH	1	4	434	UPH	1	4
26	GGS	21	84	162	GGS	10	40	298	UPH	6	24	435	UPH	1	4
27	GGS	2	8	163	SWIM SV	11	45	299	UPH	6	24	436	MFC	1	4
28	UPH	14	57	164	G F G S	6	24	300	G F G S	6	24	437	BCL	3	12
29	UPH	36	144	165	UPH	3	12	301	UPH	2	8	438	UPH	1	4
30	UPH	11	45	166	UPH	7	28	302	G F G S	13	53	439	UPH	4	16
31	GGS	3	12	167	GGS	3	12	303	GF	1	4	440	GGS	104	416
32	UPH	36	146	168	GGS	12	48	304	GF	1	4	441	UPH	2	8
33	UPH	5	20	169	UPH	21	85	305	GGS	2	8	442	COH/MSV	2	8
34	GGS	3	12	170	UPH	19	76	306	GF	1	4	443	UPH	32	128
35	UPH	2	8	171	UPH	59	239	307	OF	1	4	444	AG CO	116	469
36	GF	1	4	172	GGS	2	8	308	GF	1	4	445	UPH	1	4
37	GF	1	4	173	GGS	1	4	309	UPH	3	12	446	W	1	4
38	GF	1	4	174	GF	3	12	310	UPH	3	12	447	W	1	4
39	GGS	3	12	175	GGS	1	4	311	UPH	5	20	448	UPH	112	457
40	UPH	11	45	176	UPH	33	131	312	GGS	2	8	449	UPH	32	128
41	UPH	27	109	177	UPH	60	243	313	UPH	5	20	450	UPH	24	96
42	GF	1	4	178	UPH	99	397	314	UPH	9	36	451	UPH	16	64
43	GGS	6	24	179	UPH	6	24	315	GGS	15	61	452	UPH	8	32
44	UPH	25	101	180	GF	2	8	316	UPH	2	8	453	UPH	4	16
45	GGS	1	16	181	GF	1	4	317	UPH	2	8	454	COH	2	8
46	GGS	3	12	182	GF	1	4	318	UPH	2	8	455	GGS	1	4
47	UPH	8	32	183	GGS	19	77	319	UPH	9	36	456	SWH	1	4
48	UPH	51	205	184	UPH	18	72	320	BCL	1	4	457	MFC	8	32
49	GGS	1	4	185	UPH	11	69	321	GGS	8	36	458	UPH	10	40
50	GGS	15	61	186	UPH	15	61	322	GGS	5	20	459	UPH	22	88
51	UPH	3	12	187	UPH	14	57	323	GGS	2	8	460	GGS	58	232
52	UPH	13	53	188	UPH	9	36	324	COF S	1	12	461	UPH	33	132
53	GF	1	4	189	UPH	10	40	325	GGS	10	40	462	UPH	10	40
54	GGS	10	40	190	UPH	4	16	326	GGS	33	138	463	UPH	1	4
55	UPH	3	12	191	GGS	2	8	327	UPH	6	24	464	UPH	11	44
56	UPH	2	8	192	GF	3	12	328	UPH	2	8	465	GGS	14	57
57	GGS	2	8	193	UPH	3	12	329	UPH	1	4	466	UPH	102	410
58	GGS	4	16	194	GGS	3	12	330	G F G S	16	66	467	UPH	10	40
59	GGS	1	4	195	GGS	1	4	331	GGS	19	77	468	GGS	30	121
60	UPH	14	57	196	UPH	5	20	332	G F G S	19	77	469	GGS	30	121
61	GF	1	4	197	GGS	10	40	333	UPH	1	4	470	UPH	2	8
62	UPH	7	28	198	MFC	3	12	334	UPH	6	24	471	UPH	16	64
63	UPH	4	16	199	UPH	3	12	335	UPH	1	4	472	UPH	1	4
64	UPH	3	12	200	UPH	2	8	336	UPH	1	4	473	GGS	50	200
65	UPH	10	40	201	GGS	2	8	337	UPH	1	4	474	GGS	4	16
66	GGS	24	97	202	MFC	3	12	338	UPH	3	12	475	UPH	5	20
67	UPH	14	56	203	GGS	2	8	339	MFC	1	4	476	UPH	10	40
68	GGS	13	53	204	MFC	1	4	340	BCL	5	20	477	UPH	6	24
69	UPH	13	53	205	UPH	8	32	341	UPH	2	8	478	UPH	9	36
70	UPH	12	48	206	UPH	12	48	342	BCL	2	8	479	UPH	19	76
71	UPH	7	28	207	UPH	7	28	343	UPH	5	20	480	GGS	1	4
72	GGS	2	8	208	GF	1	4	344	UPH	2	8	481	UPH	4	16
73	UPH	36	146	209	GF	1	4	345	GGS	23	95	482	UPH	4	16
74	UPH	3	12	210	UPH	1	4	346	UPH	1	4	483	UPH	2	8
75	UPH	75	300	211	UPH	10	40	347	UPH	12	48	484	UPH	6	24
76	UPH	52	210	212	UPH	5	20	348	UPH	3	12	485	UPH	11	44
77	UPH	77	308	213	UPH	10	40	349	UPH	12	48	486	UPH	11	44
78	UPH	194	776	214	GGS	4	16	350	UPH	42	170	487	BCL	9	36
79	UPH	49	198	215	GGS	11	45	351	UPH	6	24	488	UPH	2	8
80	UPH	45	182	216	UPH	12	48	352	UPH	2	8	489	GGS	10	40
81	UPH	4	16	217	GGS	7	28	353	UPH	2	8	490	UPH	2	8
82	UPH	4	16	218	UPH	8	32	354	UPH	30	120	491	UPH	3	12
83	UPH	2	8	219	UPH	15	60	355	UPH	17	68	492	UPH	3	12
84	GGS	10	40	220	UPH	1	4	356	GGS	2	8	493	UPH	1	4
85	UPH	22	88	221	UPH	1	4	357	UPH	1	4	494	UPH	1	4
86	GGS	11	44	222	UPH	9	36	358	SWIM SV	131	530	495	BCL	204	816
87	MFC	3	12	223	UPH	4	16	359	UPH	2	8	496	GGS	20	80
88	UPH	38	152	224	GGS	1	4	360	UPH	2	8	497	UPH	3	12
89	GGS	1	4	225	GGS	1	4	361	UPH	11	45	498	UPH	55	220
90	UPH	2	8	226	UPH	3	12	362	UPH	6	24	499	UPH	74	296
91	UPH	36	146	227	GGS	3	12	363	UPH	1	4	500	UPH	4	16
92	UPH	13	52	228	UPH	1	4	364	UPH	9	36	501	UPH	1	4
93	UPH	38	154	229	GGS	1	4	365	UPH	36	144	502	UPH	1	4
94	UPH	32	128	230	UPH	4	16	366	UPH	36	144	503	GGS	5	20
95	UPH	56	227	231	GGS	6	24	367	UPH	6	24	504	GGS	5	20
96	GGS	1	4	232	UPH	1115	4512	368	UPH	147	588	505	UPH	27	108
97	UPH	3	12	233	GGS	5	20	369	UPH	11	45	506	GGS	9	36
98	UPH	13	52	234	UPH	2	8	370	UPH	1	4	507	UPH	6	24
99	MFC	8	32	235	G F G S	1	20	371	UPH	136	546	508	BCL	6	24
100	UPH	20	81	236	UPH	1	20	372	UPH	1	4	509	UPH	24	97
101	UPH	20	81	237	GF	2	8	373	UPH	2	8	510	GGS	7	28
102	UPH	20	283	238	GGS	1	4	374	UPH	3	12	511	UPH	3	12
103	UPH	20	283	239	UPH	1	4	375	UPH	4	16	512	GGS	4	16
104	UPH	20	105	240	UPH	5	20	376	GGS	3	12	513	UPH	1	4
105	MFC	23	93	241	UPH	22	89	377	GGS	135	546	514	UPH		

PALAU ISLANDS

Index Map



Sheet 8 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22 Berkeley, CA Pacific Southwest Forest and Range Experiment Station Forest Service, U.S. Department of Agriculture; 1987



VEGETATION LEGEND
For explanation of vegetation type codes see Table 7

ITEM	LABEL	AREA (ACRES)	AREA (HECTARES)	ITEM	LABEL	AREA (ACRES)	AREA (HECTARES)	ITEM	LABEL	AREA (ACRES)	AREA (HECTARES)
1	MN1H	10	4.0	162	UP1H	1	4	321	UP1H	4	1.6
2	UP1L/SV	137	55.4	163	UP1H	1	4	322	UP1H	4	1.6
3	UP1H	12	4.9	164	PF1H/M	2	8	323	UP1L/SV	8	3.2
4	MN1H	25	10.1	165	PF1H	5	2.0	324	SV BB	22	8.9
5	G.G.	1	.4	166	U	6	2.4	325	UP1M/CO	11	4.5
6	SV BB	237	120.9	167	G.F.S.	7	2.8	326	C	1	.4
7	UP2H	84	34.0	168	G.F.S.	12	4.9	327	SV BB	10	4.0
8	UP1L/SV	30	12.1	169	G.F.S.	12	4.9	328	G.G.	3	1.2
9	UP1M/CO	50	20.2	170	PF1H/M	1	4	329	CO1M/UP	5	2.0
10	UP1L/SV	17	6.9	171	G.G.	1	4	330	MN1H	5	2.0
11	UP2H	180	72.8	172	UP2M	12	4.9	331	UP1H	23	9.3
12	UP1H	4391	1777.0	173	UP2M	33	13.4	332	UP1H/CO	12	4.9
13	MN1H	70	28.3	174	UP2M	3	1.2	333	G.F.G.S.	8	3.2
14	MN1H	14	5.7	175	SV	23	9.3	334	C	7	2.8
15	MN1H	356	144.1	176	G.F.G.S.	3	1.2	335	G.G.	6	2.4
16	G.F.G.S.	87	35.2	177	UP2M	1	4	336	CO1H	1	4
17	UP1H	18	7.3	178	UP2H	53	21.4	337	UP1H	1	4
18	UP1H	5	2.0	179	UP2H	3	1.2	338	G.G.	5	2.0
19	MN1H	2	.8	180	G.F.G.S.	45	18.2	339	UP1H	61	24.7
20	MN1H	7	2.8	181	G.F.G.S.	1	.4	340	G.G.	5	2.0
21	MN1H	8	3.2	182	UP1H	2	.8	341	CO1M/UP	7	2.8
22	UP1H	43	17.4	183	M.F.	110	44.5	342	CO1M/UP	2	.8
23	UP1H	2	.8	184	UP1M/CO	110	44.5	343	CO1M/UP	2	.8
24	UP1H	2	.8	185	G.F.G.S.	110	44.5	344	CO1M/UP	2	.8
25	UP1H	2	.8	186	G.F.G.S.	110	44.5	345	CO1M/UP	2	.8
26	UP1H	2	.8	187	G.F.G.S.	110	44.5	346	CO1M/UP	2	.8
27	UP1H	2	.8	188	G.F.G.S.	110	44.5	347	CO1M/UP	2	.8
28	UP1H	2	.8	189	G.F.G.S.	110	44.5	348	CO1M/UP	2	.8
29	UP1H	2	.8	190	G.F.G.S.	110	44.5	349	CO1M/UP	2	.8
30	UP1H	2	.8	191	G.F.G.S.	110	44.5	350	CO1M/UP	2	.8
31	UP1H	2	.8	192	G.F.G.S.	110	44.5	351	CO1M/UP	2	.8
32	UP1H	2	.8	193	G.F.G.S.	110	44.5	352	CO1M/UP	2	.8
33	UP1H	2	.8	194	G.F.G.S.	110	44.5	353	CO1M/UP	2	.8
34	UP1H	2	.8	195	G.F.G.S.	110	44.5	354	CO1M/UP	2	.8
35	UP1H	2	.8	196	G.F.G.S.	110	44.5	355	CO1M/UP	2	.8
36	UP1H	2	.8	197	G.F.G.S.	110	44.5	356	CO1M/UP	2	.8
37	UP1H	2	.8	198	G.F.G.S.	110	44.5	357	CO1M/UP	2	.8
38	UP1H	2	.8	199	G.F.G.S.	110	44.5	358	CO1M/UP	2	.8
39	UP1H	2	.8	200	G.F.G.S.	110	44.5	359	CO1M/UP	2	.8
40	UP1H	2	.8	201	G.F.G.S.	110	44.5	360	CO1M/UP	2	.8
41	UP1H	2	.8	202	G.F.G.S.	110	44.5	361	CO1M/UP	2	.8
42	UP1H	2	.8	203	G.F.G.S.	110	44.5	362	CO1M/UP	2	.8
43	UP1H	2	.8	204	G.F.G.S.	110	44.5	363	CO1M/UP	2	.8
44	UP1H	2	.8	205	G.F.G.S.	110	44.5	364	CO1M/UP	2	.8
45	UP1H	2	.8	206	G.F.G.S.	110	44.5	365	CO1M/UP	2	.8
46	UP1H	2	.8	207	G.F.G.S.	110	44.5	366	CO1M/UP	2	.8
47	UP1H	2	.8	208	G.F.G.S.	110	44.5	367	CO1M/UP	2	.8
48	UP1H	2	.8	209	G.F.G.S.	110	44.5	368	CO1M/UP	2	.8
49	UP1H	2	.8	210	G.F.G.S.	110	44.5	369	CO1M/UP	2	.8
50	UP1H	2	.8	211	G.F.G.S.	110	44.5	370	CO1M/UP	2	.8
51	UP1H	2	.8	212	G.F.G.S.	110	44.5	371	CO1M/UP	2	.8
52	UP1H	2	.8	213	G.F.G.S.	110	44.5	372	CO1M/UP	2	.8
53	UP1H	2	.8	214	G.F.G.S.	110	44.5	373	CO1M/UP	2	.8
54	UP1H	2	.8	215	G.F.G.S.	110	44.5	374	CO1M/UP	2	.8
55	UP1H	2	.8	216	G.F.G.S.	110	44.5	375	CO1M/UP	2	.8
56	UP1H	2	.8	217	G.F.G.S.	110	44.5	376	CO1M/UP	2	.8
57	UP1H	2	.8	218	G.F.G.S.	110	44.5	377	CO1M/UP	2	.8
58	UP1H	2	.8	219	G.F.G.S.	110	44.5	378	CO1M/UP	2	.8
59	UP1H	2	.8	220	G.F.G.S.	110	44.5	379	CO1M/UP	2	.8
60	UP1H	2	.8	221	G.F.G.S.	110	44.5	380	CO1M/UP	2	.8
61	UP1H	2	.8	222	G.F.G.S.	110	44.5	381	CO1M/UP	2	.8
62	UP1H	2	.8	223	G.F.G.S.	110	44.5	382	CO1M/UP	2	.8
63	UP1H	2	.8	224	G.F.G.S.	110	44.5	383	CO1M/UP	2	.8
64	UP1H	2	.8	225	G.F.G.S.	110	44.5	384	CO1M/UP	2	.8
65	UP1H	2	.8	226	G.F.G.S.	110	44.5	385	CO1M/UP	2	.8
66	UP1H	2	.8	227	G.F.G.S.	110	44.5	386	CO1M/UP	2	.8
67	UP1H	2	.8	228	G.F.G.S.	110	44.5	387	CO1M/UP	2	.8
68	UP1H	2	.8	229	G.F.G.S.	110	44.5	388	CO1M/UP	2	.8
69	UP1H	2	.8	230	G.F.G.S.	110	44.5	389	CO1M/UP	2	.8
70	UP1H	2	.8	231	G.F.G.S.	110	44.5	390	CO1M/UP	2	.8
71	UP1H	2	.8	232	G.F.G.S.	110	44.5	391	CO1M/UP	2	.8
72	UP1H	2	.8	233	G.F.G.S.	110	44.5	392	CO1M/UP	2	.8
73	UP1H	2	.8	234	G.F.G.S.	110	44.5	393	CO1M/UP	2	.8
74	UP1H	2	.8	235	G.F.G.S.	110	44.5	394	CO1M/UP	2	.8
75	UP1H	2	.8	236	G.F.G.S.	110	44.5	395	CO1M/UP	2	.8
76	UP1H	2	.8	237	G.F.G.S.	110	44.5	396	CO1M/UP	2	.8
77	UP1H	2	.8	238	G.F.G.S.	110	44.5	397	CO1M/UP	2	.8
78	UP1H	2	.8	239	G.F.G.S.	110	44.5	398	CO1M/UP	2	.8
79	UP1H	2	.8	240	G.F.G.S.	110	44.5	399	CO1M/UP	2	.8
80	UP1H	2	.8	241	G.F.G.S.	110	44.5	400	CO1M/UP	2	.8
81	UP1H	2	.8	242	G.F.G.S.	110	44.5	401	CO1M/UP	2	.8
82	UP1H	2	.8	243	G.F.G.S.	110	44.5	402	CO1M/UP	2	.8
83	UP1H	2	.8	244	G.F.G.S.	110	44.5	403	CO1M/UP	2	.8
84	UP1H	2	.8	245	G.F.G.S.	110	44.5	404	CO1M/UP	2	.8
85	UP1H	2	.8	246	G.F.G.S.	110	44.5	405	CO1M/UP	2	.8
86	UP1H	2	.8	247	G.F.G.S.	110	44.5	406	CO1M/UP	2	.8
87	UP1H	2	.8	248	G.F.G.S.	110	44.5	407	CO1M/UP	2	.8
88	UP1H	2	.8	249	G.F.G.S.	110	44.5	408	CO1M/UP	2	.8
89	UP1H	2	.8	250	G.F.G.S.	110	44.5	409	CO1M/UP	2	.8
90	UP1H	2	.8	251	G.F.G.S.	110	44.5	410	CO1M/UP	2	.8
91	UP1H	2	.8	252	G.F.G.S.	110	44.5	411	CO1M/UP	2	.8
92	UP1H	2	.8	253	G.F.G.S.	110	44.5	412	CO1M/UP	2	.8
93	UP1H	2	.8	254	G.F.G.S.	110	44.5	413	CO1M/UP	2	.8
94	UP1H	2	.8	255	G.F.G.S.	110	44.5	414	CO1M/UP	2	.8
95	UP1H	2	.8	256	G.F.G.S.	110	44.5	415	CO1M/UP	2	.8
96	UP1H	2	.8	257	G.F.G.S.	110	44.5	416	CO1M/UP	2	.8
97	UP1H	2	.8	258	G.F.G.S.	110	44.5	417	CO1M/UP	2	.8
98	UP1H	2	.8	259	G.F.G.S.	110	44.5	418	CO1M/UP	2	.8
99	UP1H	2	.8	260	G.F.G.S.	110	44.5	419	CO1M/UP	2	.8
100	UP1H	2	.8	261	G.F.G.S.	110	44.5	420	CO1M/UP	2	.8
101	UP1H	2	.8	262	G.F.G.S.	110	44.5	421	CO1M/UP	2	.8
102	UP1H	2	.8	263	G.F.G.S.	110	44.5	422	CO1M/UP	2	.8
103	UP1H	2	.8	264	G.F.G.S.	110	44.5	423	CO1M/UP	2	.8
104	UP1H	2	.8	265	G.F.G.S.	110	44.5	424	CO1M/UP	2	.8
105	UP1H	2	.8	266	G.F.G.S.	110	44.5	425	CO1M/UP	2	.8
106	UP1H	2	.8	267	G.F.G.S.	110	44.5	426	CO1M/UP	2	.8
107	UP1H	2	.8	268	G.F.G.S.	110	44.5	427	CO1M/UP	2	.8
108	UP1H	2	.8	269	G.F.G.S.	110	44.5	428	CO1M/UP	2	.8
109	UP1H	2	.8	270	G.F.G.S.	110	44.5	429	CO1M/UP	2	.8
110	UP1H	2	.8	271	G.F.G.S.	110	44.5	430	CO1M/UP	2	.8
111	UP1H	2	.8	272	G.F.G.S.	110	44.5	431	CO1M/UP	2	.8
112	UP1H	2	.8	273	G.F.G.S.	110	44.5	432	CO1M/UP	2	.8
113	UP1H	2	.8	274	G.F.G.S.	110	44.5	433	CO1M/UP	2	.8
114	UP1H	2	.8	275	G.F.G.S.	110	44.5	434	CO1M/UP	2	.8
115	UP1H	2	.8	276	G.F.G.S.	110	44.5	435	CO1M/UP	2	.8
116	UP1H	2	.8	277	G.F.G.S.	110	44.5	436	CO1M/UP	2	.8
117	UP1H	2	.8	278	G.F.G.S.	110	44.5	437	CO1M/UP	2	.8
118	UP1H	2	.8	279	G.F.G.S.	110	44.5	438	CO1M/UP	2	.8
119	UP1H	2	.8	280	G.F.G.S.	110	44.5	439	CO1M/UP	2	.8
120	UP1H	2	.8	281	G.F.G.S.	110	44.5	440	CO1M/UP	2	.8
121	UP1H	2	.8	282	G.F.G.S.	110	44.5	441	CO1M/UP	2	.8
122	UP1H	2	.8	283	G.F.G.S.	110	44.5	442	CO1M/UP	2	.8
123	UP1H	2	.8	284	G.F.G.S.	110	44.5	443	CO1M/UP	2	.8
124	UP1H	2	.8	285	G.F.G.S.	110	44.5	444	CO1M/UP	2	.8
125	UP1H	2	.8	286	G.F.G.S.	110	44.5	445	CO1M/UP	2	.8
126	UP1H	2	.8	287	G.F.G.S.	110	44.5	446	CO1M/UP	2	.8
127	UP1H	2	.8	288	G.F.G.S.	110	44.5	447	CO1M/UP	2	.8
128	UP1H	2	.8	289	G.F.G.S.	110	44.5	448	CO1M/UP	2	.8

PALAU ISLANDS

Index Map



Sheet 9 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig O., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22 Berkeley, CA Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 1987

For explanation of vegetation type codes see Table 7

Vegetation map compiled by Pacific Southwest Forest and Range Experiment Station and Pacific Northwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific Southwest Region, Engineering Geomorphics Section, 1987.

SCALE 1:20,000

CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL

UNDERLINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 METER

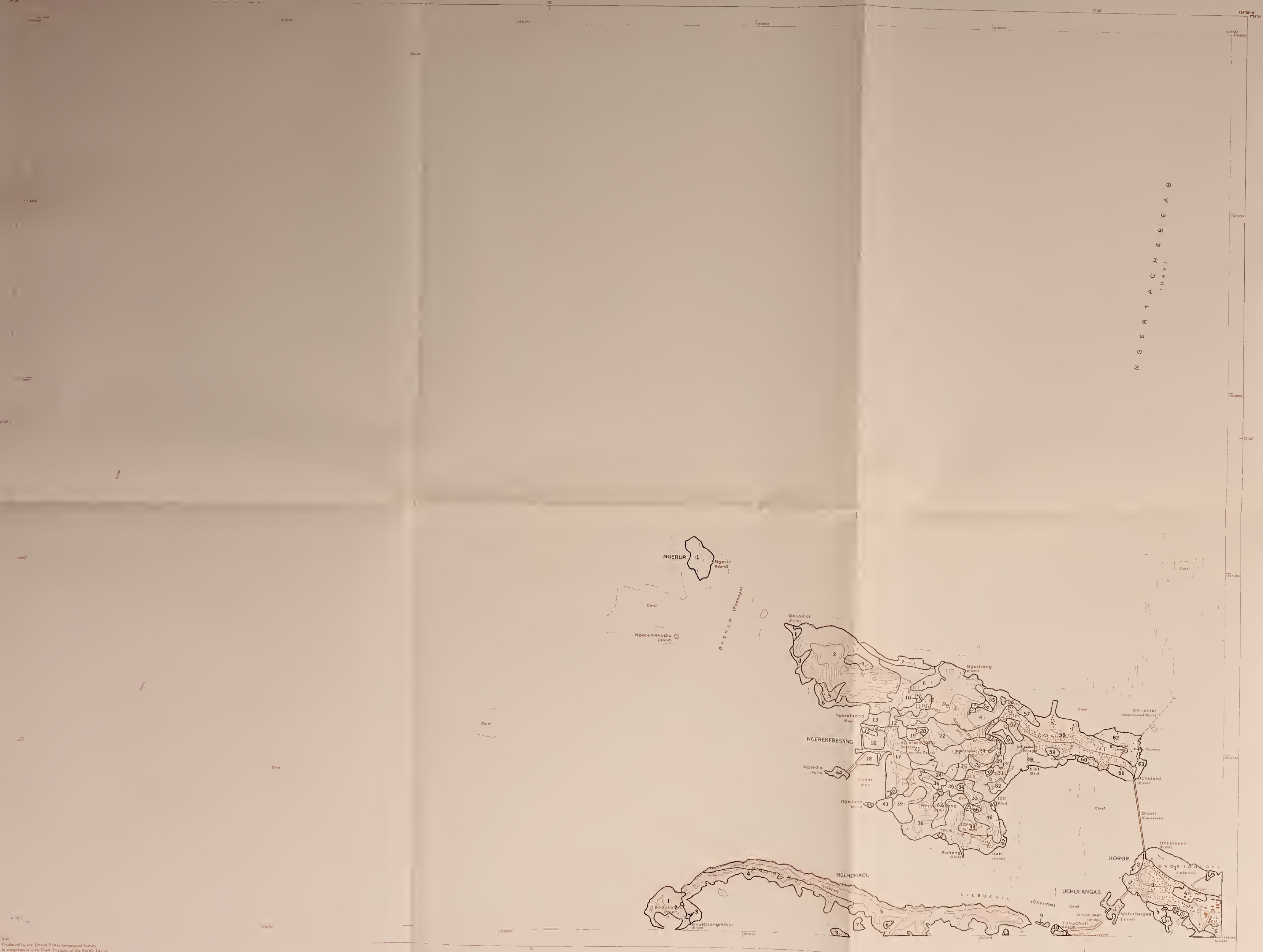
PALAU ISLANDS

Index Map



Sheet 10 of 17

Cole, Thomas G., Fatanruw, Marjorie C., MacLean, Colin D., Whilesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA Pacific Southwest Forest and Range Experiment Station. Forest Service, U.S. Department of Agriculture: 1987.



Produced by the United States Geological Survey
in cooperation with Trust Territory of the Pacific Islands
Control by FWS and FTH
Compiled by geologic survey, cartographic from aerial photography
1944 and 1972-73. Field checked 1972. (United States
Map Series 1972)
Projection and datum grid refer to the coordinate system
indicated in the map's title block.

SCALE 1:20,000
CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL

SHORELINE SKETCH REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 METER

Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture
Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomatics Section, 1987.

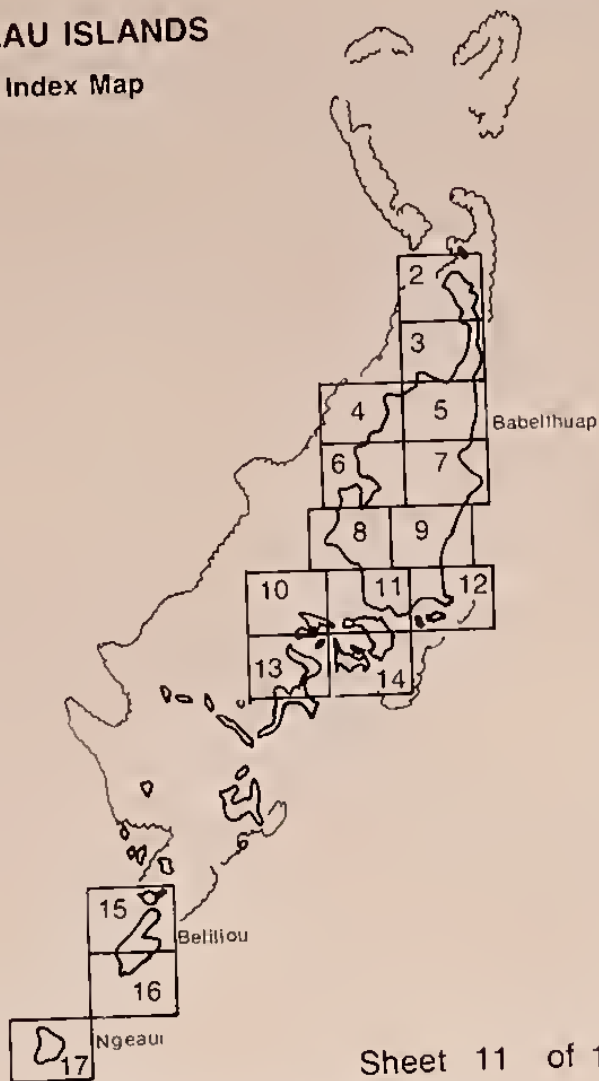
PALAU ISLANDS
SHEET 10 of 17

VEGETATION LEGEND
For explanation of vegetation type codes see Table 7.

ITEM	LABEL	AREA (ACRES) (HECTARES)
KOROR		
1	MN1H	28 11.3
2	MN1H	2 8
3	U	48 18.6
4	C	5 2.0
5	MN1H	10 4.0
6	SV	2 8
NGERCHAOL		
1	RI1H	17 6.6
2	W	1 4
3	W	1 4
4	RI1H	34 13.7
5	RI1H	93 37.6
6	W.S	1 4
7	RI1H	2 8
8	RI1H	2 8
9	RI1H	1 4
10	RI1H	1 4
11	U	1 4
12	RI1H	1 4
NGEREKESANG		
1	G.G	2 8
2	UP1H	90 36.4
3	G.G	4 1.6
4	UP2M	5 2.0
5	G.G.P	4 1.6
6	G.G	6 2.4
7	MN1H	8 3.2
8	G.G	7 2.8
9	UP1H	85 34.3
10	G.S	1 4
11	G.G	5 2.0
12	G.G.P	5 2.0
13	UP1HP	5 2.0
14	G.G.S	2 8
15	C	1 4
16	SV	6 2.4
17	U	26 10.5
18	SV/C	4 1.6
19	G.G	2 8
20	SV	1 4
21	C	8 3.2
22	G.G.S	20 8.0
23	UP1H	23 9.3
24	U/C	7 2.8
25	SV	4 1.6
26	G.G	3 1.2
27	U	1 4
28	C	1 4
29	G.G	3 1.2
30	C	1 4
31	UP1M/SV	24 9.7
32	G.G	3 1.2
33	C	5 2.0
34	U	1 4
35	UP1H	4 1.6
36	G.G	4 1.6
37	G.F.S	1 4
38	UP1H	47 19.0
39	SV	11 4.4
40	SV	1 4
41	RI1H	3 1.2
42	G.G.S	9 3.6
43	U	1 4
44	G.G.S	8 3.2
45	U	1 4
46	UP1H	11 4.4
47	MN1H	2 8
48	MN1H	1 4
49	MN1H	15 6.0
50	C	2 8
51	C	1 4
52	C	4 1.6
53	C	1 4
54	G.G	1 4
55	C	3 1.2
56	M.E	1 4
57	SV	4 1.6
58	U	56 22.6
59	C	2 8
60	MN1H	2 8
61	MN1H	5 2.0
62	G.G	13 5.2
63	MN1H	3 1.2
64	SV	3 1.2
65	G.S	1 4
66	C	1 4
NGERUR		
1	RI1H	13 5.2
UCHULANGAS		
1	U	5 2.0

PALAU ISLANDS

Index Map



Sheet 11 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22 Berkeley, CA: Pacific Southwest Forest and Range Experiment Station. Forest Service, U.S. Department of Agriculture; 1987.



Produced by the United States Geological Survey
in cooperation with the Palau Government and the Pacific Islands
Geological Survey
Map of Palau and the Pacific Islands
Scale 1:20,000
CONTOUR INTERVAL 10 METERS
SURFACE ELEVATION CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL
Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station and Pacific Northwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture.
Palau Islands, Palau, Federated States of Micronesia, 1975
SHEET 11 of 17

VEGETATION LEGEND
For explanation of vegetation type codes see Table 7

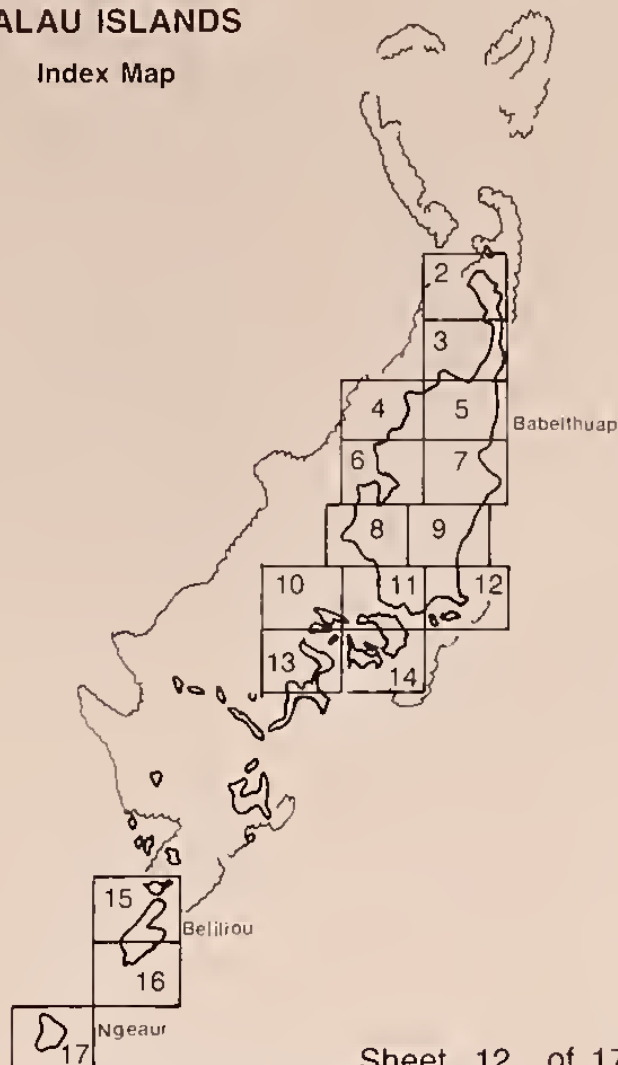
ITEM	LABEL	AREA ACRES	AREA HECTARES	ITEM	LABEL	AREA ACRES	AREA HECTARES
1	UP1H	4079	1650.7	142	UP1M	2	6
2	G.F.G.S.	6	2.4	143	G.G.	3	1.2
3	G.G.S.	2	0.8	144	UP1H	3	1.2
4	G.G.S.	2	0.8	145	G.G.S.	54	21.9
5	UP0H	9	3.6	146	UP2H	1	0.4
6	G.G.S.	3	1.2	147	UP1H	5	2.0
7	G.F.G.S.	1	0.4	148	UP1H	1	0.4
8	G.F.G.S.	2	0.8	149	UP2H	9	3.6
9	G.F.S.	2	0.8	150	UP1H	7	2.8
10	G.F.	2	0.8	151	G.G.S.	3	1.2
11	G.F.	2	0.8	152	M.F.P.	5	2.0
12	G.F.	1	0.4	153	UP0H	4	1.6
13	UP2H	5	2.0	154	UP1H	1	0.4
14	G.G.S.	7	2.8	155	MN1H	6	2.4
15	G.F.S.	1	0.4	156	UP1H	1	0.4
16	G.F.G.S.	6	2.4	157	C	2	0.8
17	G.F.S.	1	0.4	158	UP1H	2	0.8
18	G.G.S.	1	0.4	159	UP1H	2	0.8
19	UP2M	145	58.7	160	M.F.P.	2	0.8
20	G.G.S.	1	0.4	161	M.F.P.	7	2.8
21	G.G.S.	2	0.8	162	UP1H	7	2.8
22	G.F.G.S.	6	2.4	163	G.F.G.P.	97	39.3
23	G.F.S.	3	1.2	164	UP1H	5	2.0
24	UP1M	5	2.0	165	UP1H	3	1.2
25	UP0H	17	6.8	166	UP0H	22	8.9
26	G.F.G.S.	36	14.6	167	AG.CO	1	0.4
27	UP1H	23	9.3	168	UP2M/SV	3	1.2
28	UP1H	169	68.4	169	G.F.	1	0.4
29	SV	3	1.2	170	U	12	4.8
30	G.F.G.S.	18	7.3	171	G.G.S.	8	3.2
31	UP0H	13	5.3	172	UP1H	2	0.8
32	G.F.G.S.	38	15.4	173	SWIM/SV	6	2.4
33	SV	2	0.8	174	C	3	1.2
34	UP1H	1	0.4	175	G	41	16.6
35	CO1H	1	0.4	176	M.F.P.	7	2.8
36	MN1H	787	318.5	177	UP1H	15	6.1
37	SWIM	8	3.2	178	G	7	2.8
38	G.G.	60	24.3	179	G.F.G.S.	17	6.8
39	UP1H	8	3.2	180	UP1H	4	1.6
40	UP1H	3	1.2	181	UP1H	3	1.2
41	UP1H	1	0.4	182	UP1H	5	2.0
42	G.F.G.	22	8.9	183	MN1H	66	26.7
43	G.F.S.	2	0.8	184	SWIL/SV	40	16.2
44	G.G.S.	57	23.1	185	M.F.	3	1.2
45	SV	5	2.0	186	UP1H	4	1.6
46	G.G.	36	14.6	187	UP1H	2	0.8
47	G.G.S.	18	7.3	188	UP1H	1	0.4
48	G.G.S.	4	1.6	189	M.F.	1	0.4
49	G.G.	4	1.6	190	C/SV	5	2.0
50	G.G.	1	0.4	191	MN2H	10	4.0
51	G.G.	1	0.4	192	G.F.S.	13	5.3
52	G.G.S.	3	1.2	193	MN1H	7	2.8
53	M.F.P.	1	0.4	194	AG.CO	31	12.5
54	G.G.S.	1	0.4	195	G.G.	8	3.2
55	G.G.S.	2	0.8	196	CO1H	1	0.4
56	G.G.S.	1	0.4	197	C	3	1.2
57	G.F.G.	1	0.4	198	G	1	0.4
58	G.F.G.	2	0.8	199	C	12	4.8
59	M.F.P.	2	0.8	200	C	1	0.4
60	M.F.P.	1	0.4	201	U	1	0.4
61	M.F.P.	1	0.4	202	MN1H	11	4.5
62	G.G.	2	0.8	203	MN1H	11	4.5
63	G.G.	1	0.4	204	MN1H	44	17.8
64	G.G.S.	14	5.7	205	MN1H	14	5.7
65	MN1H	16	6.5	206	MN1H	26	10.4
66	G.G.	14	5.7	207	SV	3	1.2
67	G.G.S.	14	5.7	208	SV	6	2.4
68	UP2M	6	2.4	209	SV	2	0.8
69	G.F.	1	0.4	210	SWIM/SV	14	5.7
70	G.F.G.S.	1	0.4	211	CO1M/SV	5	2.0
71	G.F.	2	0.8	212	UP2H	3	1.2
72	UP2H	3	1.2	213	SV	5	2.0
73	G.F.G.S.	1	0.4	214	G.G.	68	27.5
74	G.G.	24	9.7	215	UP1H	75	30.4
75	M.F.P.	25	10.1	216	M.F.P.	3	1.2
76	SWIL/SV	50	20.2	217	G.F.G.P.	24	9.7
77	SWIL/SV	3	1.2	218	UP1H	3	1.2
78	G.G.	3	1.2	219	G.F.G.P.	160	64.8
79	UP1H	2	0.8	220	BO	8	3.2
80	G.G.	1	0.4	221	UP1H	1	0.4
81	G.G.	1	0.4	222	UP1H	3	1.2
82	CO1M/UP	15	6.1	223	G.G.	43	17.4
83	UP1H	2	0.8	224	U	4	1.6
84	G.G.	4	1.6	225	G	11	4.5
85	G.F.G.S.	3	1.2	226	U	9	3.6
86	G.G.S.	17	6.9	227	C	2	0.8
87	G.G.	14	5.7	228	UP2M/SV	2	0.8
88	UP2H	14	5.7	229	UP1H	3	1.2
89	G.G.S.	2	0.8	230	U/C	51	20.6
90	G.G.S.	2	0.8	231	UP1H	3	1.2
91	G.G.S.	2	0.8	232	UP1H	4	1.6
92	UP2H	3	1.2	233	G.G.S.	1	0.4
93	G.F.G.S.	3	1.2	234	G.G.	17	6.9
94	G.F.G.S.	6	2.4	235	SV	9	3.6
95	UP2M	22	8.9	236	UP1H	8	3.2
96	G.F.G.S.	28	11.3	237	G.G.	6	2.4
97	UP2H	9	3.6	238	MN2H	10	4.0
98	G.F.	9	3.6	239	SWIM/SV	38	15.4
99	G.F.	9	3.6	240	M.F.C.	2	0.8
100	G.F.G.S.	14	5.7	241	C	1	0.4
101	G.G.S.	1	0.4	242	CO1M/UP	1	0.4
102	W	10	4.0	243	UP1H	3	1.2
103	UP1L	2	0.8	244	G.G.	3	1.2
104	G.G.S.	3	1.2	245	UP1M	5	2.0
105	G.G.	6	2.4	246	C	4	1.6
106	G.F.G.P.	16	6.5	247	C	3	1.2
107	UP2H	6	2.4	248	G.G.	69	27.8
108	UP2M	20	8.1	249	SWIM/SV	7	2.8
109	UP2M	16	6.5	250	UP1H	15	6.1
110	G.G.S.	3	1.2	251	UP1H	1	0.4
111	G.F.S.	3	1.2	252	SWIM	2	0.8
112	UP2M	4	1.6	253	CO1M/SV	1	0.4
113	G.G.	4	1.6	254	M.F.P.	13	5.3
114	G.G.S.	4	1.6	255	AG.CO	16	6.5
115	UP2M	5	2.0	256	C	1	0.4
116	G.G.	2	0.8	257	UP1H	2	0.8
117	G.G.	1	0.4	258	C	4	1.6
118	UP0H	8	3.2	259	SWIM/SV	6	2.4
119	G.G.	5	2.0	260	UP1H	1	0.4
120	UP1H	1	0.4	261	C	7	2.8
121	G.G.	1	0.4	262	UP1M/C	14	5.7
122	G.G.S.	9	3.6	263	UP1H	6	2.4
123	G.F.G.S.	11	4.5	264	UP0H	9	3.6
124	G.G.	4	1.6	265	G.G.	2	0.8
125	G.G.S.	2	0.8	266	M.F.P.	2	0.8
126	UP1H	1	0.4	267	G.G.S.	3	1.2
127	G.F.G.P.	69	27.8	268	G.G.S.	99	40.1
128	UP1H	28	11.3	269	UP1L/CO	9	3.6
129	UP1H	2	0.8	270	G.G.	3	1.2
130	UP1H	9	3.6	271	SV	7	2.8
131	UP0H	3	1.2	272	UP1H	12	4.9
132	G.G.S.	1	0.4	273	SV	4	1.6
133	UP1H	7	2.8	274	SV	1	0.4
134	G.G.S.	5	2.0	275	G.G.	169	68.4
135	C	105	42.5	276	UP1H	10	4.0
136	C	14	5.7	277	C/SV	2	0.8
137	G.G.	10	4.0	278	UP1H	7	2.8
138	UP1M	2	0.8	279	UP1M/SV	9	3.6
139	G.G.	7	2.8	280	UP1M/SV	18	7.3
140	G.G.	1	0.4	281	UP1M/SV	5	2.0
141	G.G.	5	2.0				

282	W	4	1.6
283	G	1	0.4
284	C	2	0.8
285	MN1H	34	13.8
286	C	3	1.2
287	MN1H	40	16.2
288	RI1H	2	0.8
289	W	1	0.4
290	G	1	0.4
291	C	3	1.2
292	SV	5	2.0
293	RI1H	11	4.5
294	MN1H	6	2.4
295	SWIM/SV	15	6.1
296	MN1H	17	6.9
297	G	4	1.6
298	G	1	0.4
299	SWIM/SV	0	0.0
300	G	40	16.2
301	G	1	0.4
302	G	3	1.2
303	UP1H	21	8.5
304	UP1H	14	5.7
305	UP1H	2	0.8
306	UP1H	9	3.6
307	UP1H	1	0.4
308	UP1H	1	0.4
309	UP1H	1	0.4
310	UP1H	2	0.8
311	UP1H	5	2.0

1	RI1H	22	8.9
1	RI1H	4	1.6
1	RI1H	4	1.6
1	RI1H	6	2.4

PALAU ISLANDS

Index Map



Sheet 12 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D.,
 Whitesell, Craig O., Ambacher, Alan H. Vegetation survey of
 the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA
 Pacific Southwest Forest and Range Experiment Station
 Forest Service, U.S. Department of Agriculture, 1987

PALAU ISLANDS

Index Map

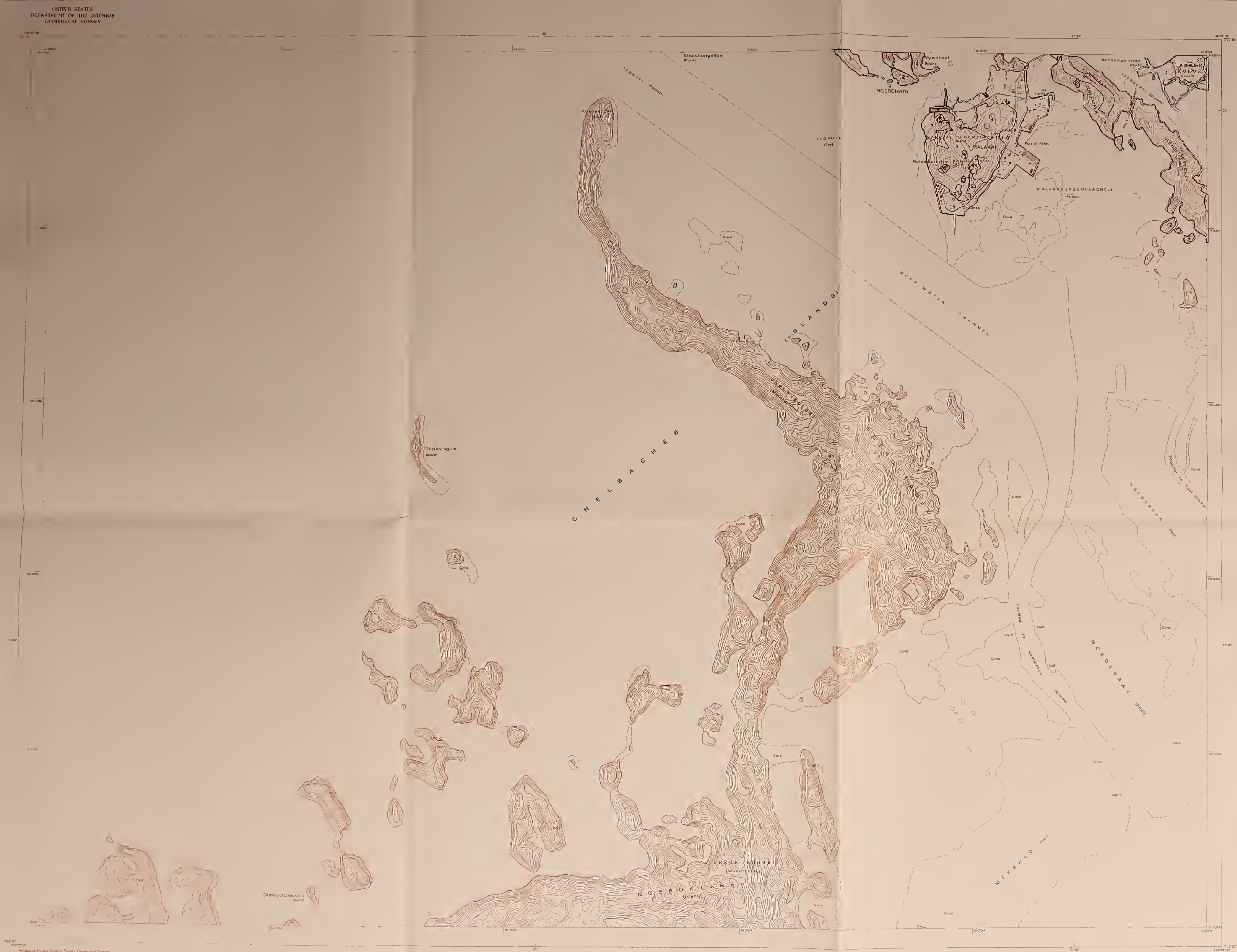


Sheet 13 of 17

Cole, Thomas G.; Falantuw, Marjorie C., MacLean, Colin D.;
Whitesell, Craig D., Ambacher, Alan H., Vegetation survey of
the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA:
Pacific Southwest Forest and Range Experiment Station.
Forest Service, U.S. Department of Agriculture, 1987

VEGETATION LEGEND
For explanation of vegetation type codes see Table 7

ITEM	LABEL	AREA (ACRES) (HECTARES)
KOROR		
1	U	12 4.9
2	MN1H	17 6.9
3	U	1 4
4	SV	1 4
MALAKAL		
1	R10H	6 2.4
2	U	79 32.0
3	SV	21 8.5
4	WS	1 4
5	B	8 3.2
6	SV	1 4
7	SV	3 1.2
8	UP1H	65 26.3
9	B.R	1 4
10	SV	1 4
11	B.R	1 4
12	GS	1 4
13	GS	4 1.6
14	B	2 8
15	U	15 6.1
NGERCHAOL		
1	R11H	9 3.6
2	R11H	4 1.6
3	R11H	6 2.4
4	R11H	4 1.6
5	R11H	1 4
NGERMALK		
1	U	1 4
2	R11H	13 5.3
3	WS	1 4
4	R10H	44 17.8
5	R10H	1 4
ULEBSECHL		
1	R10H	66 26.7
2	R10H	4 1.6
3	R10H	1 4
4	R11H	1 4



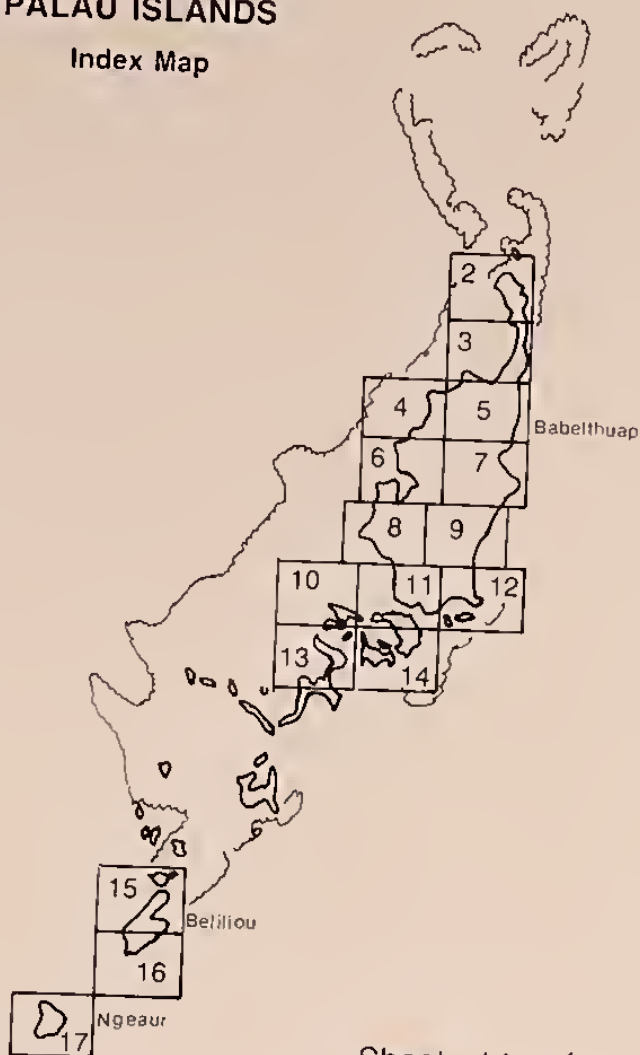
Produced by the United States Geological Survey
in cooperation with the Trust Territory of the Pacific Islands
Control No. 16-60-100-100
Compiled by photogrammetric methods from aerial photographs
taken 1960-71. First checked 1970. Latest field check 1980.
Map added 1987.
Projection and datum: UTM, Zone 52N, Datum: 1960
(Modified / unmodified / unmodified)

SCALE 1:20,000
CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
DATUM IS MEAN SEA LEVEL
SHELLING SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 METER

Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station and Pacific Northwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture.
Cartography by Alan H. Ambach, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomatics Section, 1987.

PALAU ISLANDS

Index Map



Sheet 14 of 17

Cole, Thomas G., Falaniuw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22, Berkeley, CA Pacific Southwest Forest and Range Experiment Station. Forest Service, U.S. Department of Agriculture, 1987.

PALAU ISLANDS

Index Map



Sheet 15 of 17

Cole, Thomas G., Falaruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 1987

For explanation of vegetation type codes see Table 7

RURIID			
1	MN1H	11	4.5
2	AG	14	5.7

TINGABARD

1	MNTH	2	8
---	------	---	---

17 18

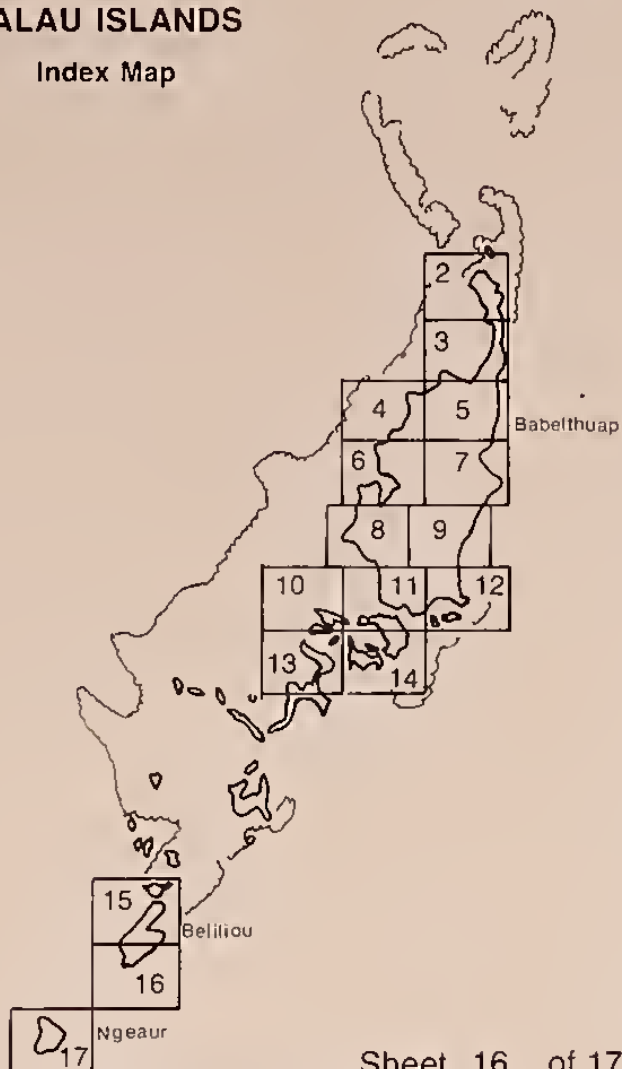
17 18

Vegetation map compiled by Pacific Southwest Forest and Range Experiment Station and Pacific Northwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific Southwest Region, Engineering Geometronics Section, 1987.

PALAU ISLANDS
SHEET 15 of 17

PALAU ISLANDS

Index Map



Sheet 16 of 17

Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D., Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 1987.

For explanation of vegetation type codes see Table 7

ITEM	LABEL	AREA	
		(ACRES)	(HECTARES)
1	CA2M/SV	72	29.1
2	CA2U/SV	17	6.9
3	CA1U/SV	45	18.2
4	CA1U/SV	22	8.9
5	CA2M/SV	50	20.2
6	CA2M/AT	1	.4
7	B/S	25	10.1
8	CA1M/AT	4	1.6
9	CA2M/SV	19	7.7
10	SV/S	2	.8
11	SV/S	2	.8
12	CA2M/SV	38	15.4
13	SV	12	4.9
14	CA1M/SV	150	60.7
15	CA1M/SV	4	1.6
16	SV	7	2.8
17	SV	2	.8
18	SV	19	7.7
20	CA2H	16	6.5
21	M/F	5	2.0
22	M/F	2	.8
23	M/F	2	.8
24	L1M/SV	95	38.1
25	CA1M/SV	13	5.3
26	L1H	1	.4
27	AT2H	2	.8
28	SV	5	2.0
29	CA2M/SV	5	2.0
30	CA2M/SV	27	10.9
31	L1M/SV	6	2.4
32	CA1M/L	9	3.6
33	L1H	9	3.6
34	CA2M	9	3.6
35	M/F	5	2.0
36	M/F	1	.4
37	M/F	1	.4
38	CA1M/AT	3	1.2
39	L1M/SV	40	16.2
40	CA2M/AT	3	1.2
41	CA2M/AT	3	1.2
42	CA1M	7	2.8
43	CA2M/LI	9	3.6
44	S	6	2.4
45	CA1M/LI	3	1.2
46	L1H/SV	13	5.3
47	W/S	11	4.5
48	MNTH	53	21.4
49	M/S	1	.4
50	W/S	4	1.6
51	W/S	6	2.4
52	MNTH	144	58.3
53	W/S	2	.8
54	L1H	3	1.2
55	CA1M	9	3.6
56	CA2M/LI	12	4.9
57	MNTH/L	6	2.4
58	CA2H	4	1.6
59	CA2M/AT	25	10.1
60	M/F	1	.4
61	L1M/SV	34	13.8
62	SV/H	48	19.4
63	L1H/SV	13	5.3
64	MNTH	1	.4
65	MNTH	9	3.6

Vegetation map compiled by Pacific Southwest Forest and Range Experiment Station and Pacific Northwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific Southwest Region, Engineering Geomaterials Section, 1987.

PALAU ISLANDS
SHEET 16 of 17

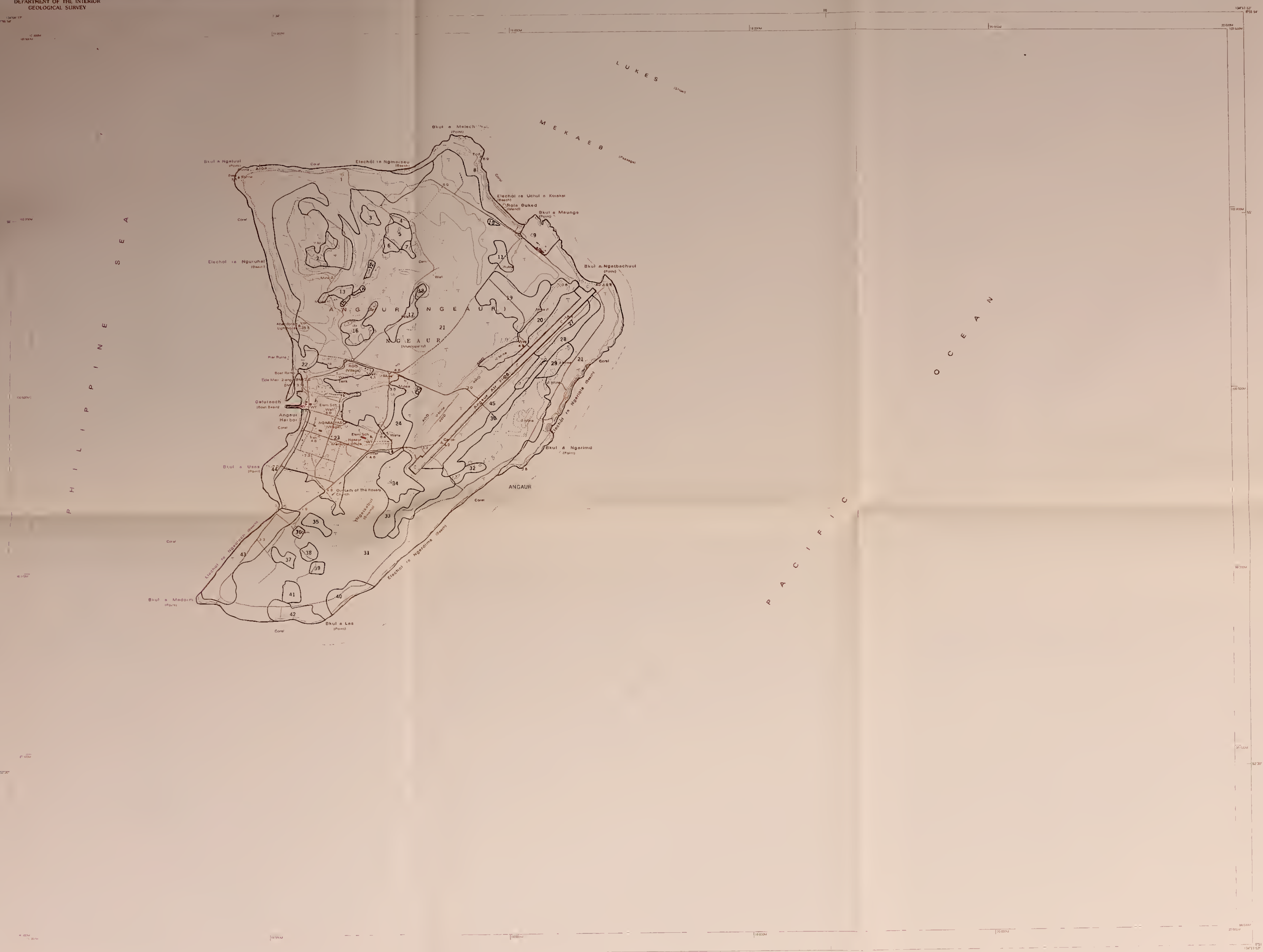
PALAU ISLANDS

Index Map



Sheet 17 of 17

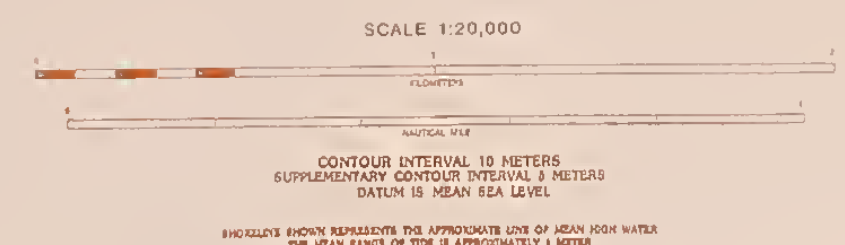
Cole, Thomas G., Falanruw, Marjorie C., MacLean, Colin D., Whitesell, Craig D.; Ambacher, Alan H. Vegetation survey of the Republic of Palau. Resour. Bull. PSW-22. Berkeley, CA. Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 1987.



VEGETATION LEGEND
For explanation of vegetation type codes see Table 7

ITEM	LABEL	AREA (ACRES) (HECTARES)
1	LIH CO	161 65.2
2	WS	9 3.6
3	CA1M	4 1.6
4	CA2M	3 1.2
5	LIH SW	8 3.2
6	SW1H	3 1.2
7	SW1H	2 0.8
8	AT1M LI	37 15.0
9	U	15 6.1
10	G	1 0.4
11	LIH/SV	7 2.8
12	SW1H	2 0.8
13	CA2M	5 2.0
14	SW1H	1 0.4
15	SW1H	1 0.4
16	SW1H	12 4.9
17	LIH/SV	9 3.6
18	SW1H	2 0.8
19	LIH/SV	36 14.6
20	CA2M	27 10.9
21	LIH/SV	863 349.2
22	CA2M/AT	11 4.5
23	U/AG	127 51.4
24	SV	20 8.1
25	B	1 0.4
26	B	32 12.9
27	CA2M	8 3.2
28	CA1M	17 6.9
29	SV	9 3.6
30	CA2M	24 9.7
31	LIH/SV	355 143.7
32	CA1M/SV	5 2.0
33	SW1H	15 6.1
34	MFC	21 8.5
35	CA2M LI	6 2.4
36	U	2 0.8
37	CA2M LI	5 2.0
38	LIH/SV	4 1.6
39	LIH/SV	3 1.2
40	AT2M LI	12 4.9
41	LIH/SV	6 2.4
42	AT2M CA	15 6.1
43	AT2M LI	43 17.4
44	AT2M LI	20 8.1
45	SV	32 12.9

Produced by the United States Geological Survey
in cooperation with Trust Territory of the Pacific Islands
Compiled by the photographer's map from aerial photographs
taken 1965-1975. 1:20,000 scale. 1975
United States Geological Survey, Reston, Virginia 20192
Palau Islands, Sheet 17 of 17



Vegetation map compiled by Pacific Southwest Forest and Range
Experiment Station and Pacific Northwest Forest and Range
Experiment Station, Forest Service, U.S. Department of Agriculture
Cartography by Alan H. Ambacher, USDA - Forest Service, Pacific
Southwest Region, Engineering Geomorphics Section, 1987

Cole, Thomas G.; Falanruw, Marjorie C.; MacLean, Colin D.; Whitesell, Craig D.; Ambacher, Alan H. **Vegetation survey of the Republic of Palau**. Resour. Bull. PSW-22. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 1987. 13 p. + 17 maps.

The vegetation of the Republic of Palau, in the Western Caroline Islands, was mapped for land-use planning, forest resource management, and timber volume surveys. The 17 maps show the location and extent of vegetation types identified from 1976 aerial photographs. Forest area is estimated at 31,259 hectares (77,241 acres) or 75 percent of the area surveyed. An additional 6,783 hectares (16,761 acres) are grasslands/savannas. At 16 percent of the total area, the grasslands/savannas of Palau have the second greatest land area.

Retrieval Terms: vegetation survey, forest types, vegetation maps, forest resources, Palau, Belau, Caroline Islands, Micronesia